



**EIGENMANN & VERONELLI S.p.A.**  
**Scheda di sicurezza**  
**GICORAN 98**

**Scheda di sicurezza del 16/4/2020, revisione 0 (Reg. 830/2015/UE)**

**SEZIONE 1: identificazione della sostanza/miscela e della società/impresa**

**1.1. Identificatore del prodotto**

Identificazione della sostanza

Nome commerciale: GICORAN 98  
Numero scheda: EV36870+AYG  
Numero CAS: 544-17-2  
Numero EC: 208-863-7  
Numero REACH: 01-2119486476-24

**1.2. Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**

Uso raccomandato:

Uso industriale.

L'elenco completo degli usi è nell'allegato con gli scenari espositivi.

**1.3. Informazioni sul fornitore della scheda di dati di sicurezza**

Fornitore:

EIGENMANN & VERONELLI S.p.A.

Via della Mosa, 6 - 20017 Rho (MI) Italy

Tel. +39 02935391 - Fax +39 02935361

Persona competente responsabile della scheda di dati di sicurezza:

stg@eigver.it

**1.4. Numero telefonico di emergenza:**

Centro Antiveleeni di Pavia - via Maugeri 10, Pavia - Tel. +39 (0)382 24444 -

<http://www.cavpavia.it/>

CAV nel mondo: World Health Organization - World directory of poison centres -

<http://apps.who.int/poisoncentres/>

**SEZIONE 2: identificazione dei pericoli**

**2.1. Classificazione della sostanza o della miscela**

Criteri Regolamento CE 1272/2008 (CLP):



Pericolo, Eye Dam. 1, Provoca gravi lesioni oculari.

Effetti fisico-chimici dannosi alla salute umana e all'ambiente:

Nessun altro pericolo.

**2.2. Elementi dell'etichetta**

Pittogrammi di pericolo:



Pericolo

Indicazioni di pericolo:

H318 Provoca gravi lesioni oculari.

Consigli di prudenza:

P280 Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso.

P305+P351+P338 IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

P310 Contattare immediatamente un CENTRO ANTIVELENI o un medico.

Disposizioni speciali:

Nessuna.

Contiene:

GICORAN 98.



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Disposizioni speciali in base all'Allegato XVII del REACH e successivi adeguamenti:

Nessuna.

2.3. Altri pericoli:


Sostanze vPvB: Nessuna - Sostanze PBT: Nessuna.

Altri pericoli:

Nessun altro pericolo.

**SEZIONE 3: composizione/informazioni sugli ingredienti**

3.1. Sostanze:

Qt.	Nome	Numero d'identif.	Classificazione
>= 90%	CALCIO FORMIATO	CAS: 544-17-2 EC: 208-863-7 REACH No.: 01-2119486476-24	 3.3/1 Eye Dam. 1 H318

3.2. Miscele:

N.A.

**SEZIONE 4: misure di primo soccorso**

4.1. Descrizione delle misure di primo soccorso

In caso di contatto con la pelle:

Lavare immediatamente con abbondante acqua corrente ed eventualmente sapone le aree del corpo che sono venute a contatto con il prodotto, anche se solo sospette.

CONSULTARE IMMEDIATAMENTE UN MEDICO.

Togliere immediatamente gli indumenti contaminati ed eliminarli in modo sicuro.

In caso di contatto con gli occhi:

Lavare immediatamente ed abbondantemente con acqua corrente, a palpebre aperte, per almeno 10 minuti; quindi proteggere gli occhi con garza sterile o un fazzoletto pulito, asciutti. RICORRERE A VISITA MEDICA.

Non usare colliri o pomate di alcun genere prima della visita o del consiglio dell'oculista.

Proteggere l'occhio illeso.

In caso di ingestione:

Poco probabile. In caso di ingestione casuale, sciacquare la bocca con acqua.

RICORRERE IMMEDIATAMENTE A VISITA MEDICA, mostrando la scheda di sicurezza.

In caso di inalazione:

Portare l'infortunato all'aria aperta e tenerlo al caldo e a riposo.

Autoprotezione del primo soccorritore:

Indossare i dispositivi di protezione individuale quando previsti (vedere par. 8.2).

4.2. Principali sintomi ed effetti, sia acuti che ritardati:

Nessuno.

4.3. Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali:

In caso d'incidente o malessere consultare immediatamente un medico (se possibile mostrare le istruzioni per l'uso o la scheda di sicurezza).

Trattamento specifico:

Trattamento sintomatico.



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**SEZIONE 5: misure antincendio**

5.1. Mezzi di estinzione

Mezzi di estinzione idonei:

Acqua nebulizzata, schiuma, polveri chimiche.

Biossido di carbonio (CO<sub>2</sub>).

Mezzi di estinzione che non devono essere utilizzati per ragioni di sicurezza:

Nessuno in particolare.

5.2. Pericoli speciali derivanti dalla sostanza o dalla miscela:

Non inalare i gas prodotti dall'esplosione e dalla combustione.

La combustione produce fumo pesante.

5.3. Raccomandazioni per gli addetti all'estinzione degli incendi:

Impiegare apparecchiature respiratorie adeguate.

Raccogliere separatamente l'acqua contaminata utilizzata per estinguere l'incendio. Non scaricarla nella rete fognaria.

Se fattibile sotto il profilo della sicurezza, spostare dall'area di immediato pericolo i contenitori non danneggiati.

**SEZIONE 6: misure in caso di rilascio accidentale**

6.1. Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza

Per chi non interviene direttamente:

Indossare i dispositivi di protezione individuale.

Spostare le persone in luogo sicuro.

Consultare le misure protettive esposte al punto 7 e 8.

Per chi interviene direttamente:

Verificare la compatibilità dei materiali degli indumenti protettivi con quanto indicato al par. 8.

6.2. Precauzioni ambientali:

Impedire la penetrazione nel suolo/sottosuolo. Impedire il deflusso nelle acque superficiali o nella rete fognaria.

Trattenere l'acqua di lavaggio contaminata ed eliminarla.

In caso di fuga di gas o penetrazione in corsi d'acqua, suolo o sistema fognario informare le autorità responsabili.

Materiale idoneo alla raccolta: materiale assorbente, organico, sabbia.

6.3. Metodi e materiali per il contenimento e per la bonifica:

Lavare con abbondante acqua.

6.4. Riferimento ad altre sezioni:

Vedi anche paragrafo 8 e 13.

**SEZIONE 7: manipolazione e immagazzinamento**

7.1. Precauzioni per la manipolazione sicura:

Evitare il contatto con la pelle e gli occhi, l'inalazione di vapori e nebbie.

Non utilizzare contenitori vuoti prima che siano stati puliti.

Prima delle operazioni di trasferimento assicurarsi che nei contenitori non vi siano materiali incompatibili residui.

Si rimanda anche al paragrafo 8 per i dispositivi di protezione raccomandati.

Raccomandazioni generali sull'igiene del lavoro:

Gli indumenti contaminati devono essere sostituiti prima di accedere alle aree da pranzo.

Durante il lavoro non mangiare né bere.



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- 7.2. Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità:  
Conservare in magazzino coperto, in ambiente fresco, secco e ventilato.  
Tenere lontano da cibi, bevande e mangimi.  
Materie incompatibili:  
Tenere lontano da ossidanti forti.  
Indicazione per i locali:  
Locali adeguatamente areati.
- 7.3. Usi finali particolari:  
Nessun uso particolare.

**SEZIONE 8: controllo dell'esposizione/protezione individuale**

- 8.1. Parametri di controllo  
Valori limite di esposizione DNEL  
DNEL for workers  
Acute systemic effects:  
Dermal = 4780 mg/kg bw/day.  
Inhalation = 337 mg/m<sup>3</sup>.  
Acute local effects:  
Dermal = 16,7 mg/cm<sup>2</sup> (NOAEL = 83,5 mg/cm<sup>2</sup>).  
Long-term systemic effects:  
Dermal = 4780 mg/kg bw/day (NOAEL = 956 mg/kg bw/day).  
Inhalation = 337 mg/m<sup>3</sup> (NOAEC = 1,685 mg/m<sup>3</sup>).  
Long-term local effects:  
Dermal = 16,7 mg/cm<sup>2</sup>.  
DNEL for the general population:  
Acute systemic effects  
Dermal = 2390 mg/kg bw/day.  
Inhalation = 83,2 mg/m<sup>3</sup> (NOAEC = 3328 mg/m<sup>3</sup>).  
Acute local effects:  
Dermal = 8,3 mg/cm<sup>2</sup> (NOAEL = 83 mg/cm<sup>2</sup>).  
Long-term systemic effects:  
Dermal = 2390 mg/kg bw/day (NOAEL = 956 mg/kg bw/day).  
Inhalation = 83,2 mg/m<sup>3</sup> (NOAEL = 832 mg/m<sup>3</sup>).  
Long-term local effects:  
Oral = 23,9 mg/kg bw/day (NOAEL = 956 mg/kg bw/day).  
Dermal = 8,3 mg/cm<sup>2</sup> (NOAEL = 83 mg/cm<sup>2</sup>).  
Valori limite di esposizione PNEC:  
Aqua (fresh water) = 2 mg/L (Assessment factor = 50).  
Aqua (marine water) = 0,2 mg/L (Assessment factor = 500).  
Aqua (intermittent releases) = 10 mg/L (Assessment factor = 100).  
STP = 2,21 mg/L (Assessment factor = 10).  
Sediment (fresh water) = 13,4 mg/kg.  
Sediment (marine water) = 1,34 mg/kg.  
Soil = 1,5 mg/kg.
- 8.2. Controlli dell'esposizione  
Protezione degli occhi:  
Occhiali di protezione dalla polvere.  
Protezione della pelle:  
Tuta da lavoro.  
Protezione delle mani:  
Guanti con polsini lunghi.  
Protezione respiratoria:  
Dispositivo di filtraggio antipolvere (DIN EN 143).



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Rischi termici:  
Nessuno.  
Controlli dell'esposizione ambientale:  
Osservare le prescrizioni indicate nell'allegato con gli scenari espositivi.  
Controlli tecnici idonei:  
Nessuno.

**SEZIONE 9: proprietà fisiche e chimiche**

9.1. Informazioni sulle proprietà fisiche e chimiche fondamentali:

Proprietà	Valore	Note:
Aspetto:	Polvere	--
Colore:	Bianco	--
Odore:	Inodore	--
Soglia di odore:	N.D.	--
pH:	--	--
Punto di fusione/congelamento:	> 300 °C	--
Punto di ebollizione iniziale e intervallo di ebollizione:	> 300 °C	--
Punto di infiammabilità:	N.D.	--
Velocità di evaporazione:	N.D.	--
Infiammabilità solidi/gas:	N.D.	--
Limite superiore/inferiore d'infiammabilità o esplosione:	N.D.	--
Pressione di vapore:	0,00022 Pa	25 °C
Densità dei vapori:	N.D.	--
Densità relativa:	2,02 g/cm <sup>3</sup>	--
Idrosolubilità:	172 mg/L	--
Solubilità in olio:	N.D.	--
Coefficiente di ripartizione (n-ottanolo/acqua):	Log Pow: < - 2,3	pH 7 , 23°C
Temperatura di autoaccensione:	292 °C	1013hPa
Temperatura di decomposizione:	N.D.	--
Viscosità:	N.D.	--
Proprietà esplosive:	Non esplosivo	--
Proprietà comburenti:	Non ossidante	--

9.2. Altre informazioni:

Proprietà	Valore	Note:
Miscibilità:	N.D.	--
Liposolubilità:	N.D.	--
Conducibilità:	N.D.	--
Proprietà caratteristiche dei gruppi di sostanze	N.A.	--

**SEZIONE 10: stabilità e reattività**

- 10.1. Reattività:  
Stabile in condizioni normali.
- 10.2. Stabilità chimica:  
Stabile in condizioni normali.
- 10.3. Possibilità di reazioni pericolose:  
Nessuno.
- 10.4. Condizioni da evitare:  
Evitare il contatto con agenti fortemente ossidanti.



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- 10.5. Materiali incompatibili  
Tenere lontano da forti ossidanti.
- 10.6. Prodotti di decomposizione pericolosi:  
CO, CO<sub>2</sub>.

**SEZIONE 11: informazioni tossicologiche**

- 11.1. Informazioni sugli effetti tossicologici  
Informazioni tossicologiche riguardanti la sostanza:

<b>Acute toxicity:</b>	
LD50 (Oral, Rat):	> 2000 mg/kg bw.
LD50 (Dermal rat):	> 2000 mg/kg bw.
LC50(Inhalation, Rat):	> 0,64 mg/m <sup>3</sup> air.
<b>Skin corrosion/irritation:</b>	Not irritating.
<b>Serious eye damage/irritation:</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization:</b>	Not sensitising.
<b>Germ cell mutagenicity:</b>	Negative.
<b>Carcinogenicity:</b>	No classification.
<b>reproductive toxicity:</b>	No classification.
<b>STOT- single exposure:</b>	Not available.
<b>STOT-repeated exposure:</b>	Not available.
<b>Aspiration hazard:</b>	Not available.

**SEZIONE 12: informazioni ecologiche**

- 12.1. Tossicità  
Utilizzare secondo le buone pratiche lavorative, evitando di disperdere il prodotto nell'ambiente.  
LC50 (Fish): > 1000 mg/l/96h (OECD 203).  
EC50 (Daphnia): > 1000 mg/l/48h (OECD 202).  
NOEC (Algae): > 500 mg/l/72h (OECD 201).
- 12.2. Persistenza e degradabilità:  
N.D.
- 12.3. Potenziale di bioaccumulo:  
N.D.
- 12.4. Mobilità nel suolo:  
N.D.
- 12.5. Risultati della valutazione PBT e vPvB:  
Sostanze vPvB: Nessuna - Sostanze PBT: Nessuna.
- 12.6. Altri effetti avversi:  
Nessuno.

**SEZIONE 13: considerazioni sullo smaltimento**

- 13.1. Metodi di trattamento dei rifiuti:  
Recuperare se possibile. Inviare ad impianti di smaltimento autorizzati o ad incenerimento in condizioni controllate. Operare secondo le vigenti disposizioni locali e nazionali.



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**SEZIONE 14: informazioni sul trasporto**

Merce non pericolosa ai sensi delle Normative vigenti sul trasporto.

14.1. Numero ONU:

N.A.

14.2. Nome di spedizione dell'ONU:

N.A.

14.3. Classi di pericolo connesso al trasporto:

N.A.

14.4. Gruppo di imballaggio:

N.A.

14.5. Pericoli per l'ambiente:

Inquinante ambientale/marino: NO

N.A.

14.6. Precauzioni speciali per gli utilizzatori:

N.A.

14.7. Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC:

N.A.

**SEZIONE 15: informazioni sulla regolamentazione**

15.1. Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela:

D.Lgs. 9/4/2008 n. 81

D.M. Lavoro 26/02/2004 (Limiti di esposizione professionali)

Regolamento (CE) n. 1907/2006 (REACH)

Regolamento (CE) n. 1272/2008 (CLP)

Regolamento (CE) n. 790/2009 (ATP 1 CLP) e (UE) n. 758/2013

Regolamento (UE) 2015/830

Regolamento (UE) n. 286/2011 (ATP 2 CLP)

Regolamento (UE) n. 618/2012 (ATP 3 CLP)

Regolamento (UE) n. 487/2013 (ATP 4 CLP)

Regolamento (UE) n. 944/2013 (ATP 5 CLP)

Regolamento (UE) n. 605/2014 (ATP 6 CLP)

Regolamento (UE) n. 2015/1221 (ATP 7 CLP)

Regolamento (UE) n. 2016/918 (ATP 8 CLP)

Regolamento (UE) n. 2016/1179 (ATP 9 CLP)

Regolamento (UE) n. 2017/776 (ATP 10 CLP)

Regolamento (UE) n. 2018/669 (ATP 11 CLP)

Regolamento (UE) n. 2018/1480 (ATP 13 CLP)

Restrizioni relative al prodotto o alle sostanze contenute in base all'Allegato XVII del Regolamento (CE) 1907/2006 (REACH) e successivi adeguamenti:

Restrizioni relative al prodotto:

Nessuna restrizione.

Restrizioni relative alle sostanze contenute:

Nessuna restrizione.

Ove applicabili, si faccia riferimento alle seguenti normative:

Direttiva 2012/18/EU (Seveso III).

Regolamento 648/2004/CE (Detergenti).

D.L. 3/4/2006 n. 152 Norme in materia ambientale.

Dir. 2004/42/CE (Direttiva COV).



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Disposizioni relative alla direttiva EU 2012/18 (Seveso III):

Il prodotto appartiene alle categorie: NA.

15.2. Valutazione della sicurezza chimica:

Non è stata effettuata una valutazione della sicurezza chimica per la sostanza.

**SEZIONE 16: altre informazioni**

Codice prodotto : 36870

Testo delle frasi utilizzate nel paragrafo 3:

H318 Provoca gravi lesioni oculari.

Classe e categoria di pericolo	Codice	Descrizione
Eye Dam. 1	3.3/1	Gravi lesioni oculari, Categoria 1

Principali fonti bibliografiche:

- ECHA Registered Substances website:  
<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
- ACGIH - Threshold Limit Values - 2004 edition
- Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

Le informazioni ivi contenute si basano sulle nostre conoscenze alla data sopra riportata. Sono riferite unicamente al prodotto indicato e non costituiscono garanzia di particolari qualità.

L'utilizzatore è tenuto ad assicurarsi della idoneità e completezza di tali informazioni in relazione all'utilizzo specifico che ne deve fare.

Sezioni modificate rispetto alla precedente revisione: 2, 3, 8, 9, 10, 11, 12, 15, 16.





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ADR:	Accordo europeo relativo al trasporto internazionale stradale di merci pericolose.
CAS:	Chemical Abstracts Service (divisione della American Chemical Society).
CLP:	Classificazione, Etichettatura, Imballaggio.
DNEL:	Livello derivato senza effetto.
EINECS:	Inventario europeo delle sostanze chimiche europee esistenti in commercio.
GefStoffVO:	Ordinanza sulle sostanze pericolose in Germania.
GHS:	Sistema globale armonizzato di classificazione e di etichettatura dei prodotti chimici.
IATA:	Associazione per il trasporto aereo internazionale.
IATA-DGR:	Regolamento sulle merci pericolose della "Associazione per il trasporto aereo internazionale" (IATA).
ICAO:	Organizzazione internazionale per l'aviazione civile.
ICAO-TI:	Istruzioni tecniche della "Organizzazione internazionale per l'aviazione civile" (ICAO).
IMDG:	Codice marittimo internazionale per le merci pericolose.
INCI:	Nomenclatura internazionale degli ingredienti cosmetici.
KSt:	Coefficiente d'esplosione.
LC50:	Concentrazione letale per il 50 per cento della popolazione di test.
LD50:	Dose letale per il 50 per cento della popolazione di test.
PNEC:	Concentrazione prevista senza effetto.
RID:	Regolamento riguardante il trasporto internazionale di merci pericolose per via ferroviaria.
STA:	Stima della tossicità acuta.
STAmix:	Stima della tossicità acuta (Miscele).
STEL:	Limite d'esposizione a corto termine.
STOT:	Tossicità organo-specifica.
TLV:	Valore limite di soglia.
TWA:	Media ponderata nel tempo.
WGK:	Classe di pericolo per le acque (Germania).

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Annex to extended safety data sheet (eSDS)****Exposure scenario 1**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
1.1	Short title of the exposure scenario Manufacture	

**Environment:**

ERC 1, ERC 6a

**Worker**

Use in closed process, no likelihood of exposurePROC 1

Use in closed, continuous process with occasional controlled exposurePROC 2

Use in closed batch process (synthesis or formulation)PROC 3

Use in batch and other process (synthesis) where opportunity for exposure arisesPROC 4

Transfer of substance or preparation (charging/discharging) from/ to vessels/large containers at non-dedicated facilitiesPROC 8a

Transfer of substance or preparation (charging/discharging) from/ to vessels/large containers at dedicated facilitiesPROC 8b

Transfer of substance or preparation into small containers (dedicated filling line, including weighing)PROC 9

Use as laboratory reagentPROC 15

Calendering operationsPROC 6

Substance in preparationNoL

Duration of activity>4 hoursL

Place of useIndoorsL

Surface of skin exposedOne hand face only (240 cm<sup>2</sup>)L L

Level of containmentUse in closed process, no likelihood of exposureL

Local Exhaust VentilationNoL L L

Respiratory protectionRespiratory protection is not usedL

Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed, continuous process with occasional controlled exposure		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
Substance in preparation	No		L		
Duration of activity	>4 hours		L		
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )			L	L
Level of containment	Use in closed batch process (synthesis or formulation)		L		
Local Exhaust Ventilation	No		L	L	L
Respiratory protection	Respiratory protection is not used		L		
<b>Control of workers exposure for "Use in batch and other process (synthesis) where opportunity for exposure arises" [PROC 4]</b>					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in batch and other process (synthesis) where opportunity for exposure arises		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>					
		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]</b>					
		Inhal*)		Derm*)	
			Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use as laboratory reagent" [PROC 15]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Product characteristics					
Substance in preparation		No		L	
Amounts used					
Frequency and duration of use/exposure					
Duration of activity		>4 hours		L	
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use		Indoors		L	
Surface of skin exposed		One hand face only (240 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation		No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection		Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA					
Control of workers exposure for "Calendering operations" [PROC 6]					
				Inhal*)	Derm*)
				Loc	Sys Loc Sys
Product characteristics					
Substance in preparation		No		L	
Amounts used					
Frequency and duration of use/exposure					
Duration of activity		>4 hours		L	
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use		Indoors		L	
Surface of skin exposed		Two hands (960 cm²)			L L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation		No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection		Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA					
1.2	Exposure estimation for Manufacture of substance				
1.2.1	Exposure estimation for the environment (Manufacture of substance)				
1.2.1.1	Environmental releases				
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.					
1.2.1.2	Environmental exposure				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Please see above.				
1.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The exposure concentrations in air is not calculated with CHESAR but considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Though not calculated with CHESAR, exposure is considered to be negligible.				
1.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			
Table 1. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		0.054 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	
1.2.2	Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure			
Table 2. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		5.421 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.2 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		1.371 mg/kg bw/day	Method: TRA workers Name: TRA workers	
1.2.2	Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 3. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or formulation)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	16.26 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

1.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation) Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises

**Table 4. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

1.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

**Table 5. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

1.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 6. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**1.2.2 Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing).**

**Table 7. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**1.2.2 Exposure estimation for Worker for Use as laboratory reagent**

**Table 8. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**1.2.2 Exposure estimation for Worker for Calendering operations**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 9. Summary of exposure concentrations for contributing scenario: Calendering operations**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	27.43 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.  
La numerazione delle pagine non è quindi consecutiva a quella della SDS.  
Questo allegato è costituito da 93 pagine.

	Substance / User identity		
	Registration number(s)	01-2119486476-24-0004	
	Substance identity	CAS#544-17-2, EC# 208-863-7	
2.1	Short title of the exposure scenario	Distribution and storage	
<b>Distribution and storage</b>			
<b>Market sector:</b>			
<b>Environment:</b> ERC 2			
<b>Worker</b>			
Use in closed process, no likelihood of exposure PROC 1			
Use in closed, continuous process with occasional controlled exposure PROC 2			
Use in closed batch process (synthesis or formulation) PROC 3			
Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 5			
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8a			
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 8b			
Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 9			
Use as laboratory reagent PROC 15			
<b>Operational conditions and risk management measures</b>			
<b>Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]</b>			
		Sys	Derm*) Loc Sys
Product characteristics			
Substance in preparation	No	L	
Frequency and duration of use/exposure			
Duration of activity	>4 hours	L	
Human factors not influenced by risk management			
Other given operational conditions affecting workers exposure			
Place of use	Indoors	L	
Surface of skin exposed	One hand face only (240 cm²)		L L
Technical conditions and measures at process level (source) to prevent release			
Level of containment	Use in closed process, no likelihood of exposure	L	
Technical conditions and measures to control dispersion from source towards the worker			
Local Exhaust Ventilation	No	L	L L
Organisational measures to prevent /limit releases, dispersion and exposure			
Conditions and measures related to personal protection, hygiene and health evaluation			
Respiratory protection	Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA			
<b>Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]</b>			
		Inhal*)	Derm*)

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed, continuous process with occasional controlled exposure		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]</b>					
				Derm*)	
			Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed batch process (synthesis or formulation)		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]</b>					
		Inhal*)		Derm*)	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>					
		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.  
La numerazione delle pagine non è quindi consecutiva a quella della SDS.  
Questo allegato è costituito da 93 pagine.

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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

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Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]		Inhal*)	Derm*)	
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Amounts used				
Frequency and duration of use/exposure				
Duration of activity		>4 hours	L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use		Indoors	L	
Surface of skin exposed		One hand face only (240 cm²)	L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation		No	L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection		Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA				
2.2	Exposure estimation for Distribution and storage			
2.2.1	Exposure estimation for the environment (Distribution and storage)			
2.2.1.1	Environmental releases			
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.				
2.2.1.2	Environmental exposure			
Please see above.				
2.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
2.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			
Table 10. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment / Explanation / Justification	
Inhalation: Long term, Systemic		0.054 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	
2.2.2	Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure			



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 11. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	5.421 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	1.371 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)**

**Table 12. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or formulation)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	16.26 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation) Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises**

**Table 13. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 14. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

**Table 15. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing).**

**Table 16. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**2.2.2 Exposure estimation for Worker for Use as laboratory reagent**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 17. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 3**

Substance / User identity		
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
3.1	Short title of the exposure scenario	Distribution and storage: All formulations
<b>Distribution and storage</b>		
<b>Market sector:</b>		
<b>Environment:</b>		
<b>Worker</b>		
Use in closed process, no likelihood of exposure		PROC 1
Use in closed, continuous process with occasional controlled exposure		PROC 2
Use in closed batch process (synthesis or formulation)		PROC 3
Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)		PROC 5
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities		PROC 8a
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities		PROC 8b
Transfer of substance or preparation into small containers (dedicated filling line, including weighing)		PROC 9
Use as laboratory reagent		PROC 15
Use in batch and other process (synthesis) where opportunity for exposure arises		PROC 4
Industrial spraying		PROC 7
Production of preparations* or articles by tableting, compression, extrusion, pelletisation		PROC 14
<b>Operational conditions and risk management measures</b>		

**Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]**

		Derm*)		
		3ys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed process, no likelihood of exposure	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]		Inhal*)		Derm*)	
		Loc		Loc	
		Sys		Sys	
Product characteristics					
Substance in preparation	No			L	
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours			L	
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors			L	
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )				L L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed, continuous process with occasional controlled exposure			L	
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No			L	L L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used			L	
Additional good practice advice beyond the REACH CSA					

Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]		Inhal*)		Derm*)	
		Loc		Loc	
		Sys		Sys	
Product characteristics					
Substance in preparation	No			L	
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours			L	
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors			L	
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )				L L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed batch process (synthesis or formulation)			L	
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No			L	L L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used			L	
Additional good practice advice beyond the REACH CSA					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

<b>Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]</b>				
		Inhal*)		Derm*)
		Loc	Sys	Loc Sys
Product characteristics				
Substance in preparation	No		L	
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours		L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors		L	
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>				
		Inhal*)		Derm*)
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No		L	
Frequency and duration of use/exposure				
Duration of activity	>4 hours		L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors		L	
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]</b>				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use as laboratory reagent" [PROC 15]</b>					
				Derm*)	
				Sys	Loc Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use in batch and other process (synthesis) where opportunity for exposure arises" [PROC 4]</b>					
				Inhal*)	Derm*)
				Loc Sys	Loc Sys

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Product characteristics				
Substance in preparation	No		L	
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours		L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors		L	
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in batch and other process (synthesis) where opportunity for exposure arises		L	
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Industrial spraying" [PROC 7]</b>				
			Sys	Derm*) Loc Sys
Product characteristics				
Substance in preparation	No		L	
Frequency and duration of use/exposure				
Duration of activity	1 - 4 hours		L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors		L	
Surface of skin exposed	Two hands and upper wrists (1500 cm <sup>2</sup> )			L L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No		L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Production of preparations* or articles by tableting, compression, extrusion, pelletisation" [PROC 14]</b>				
			Inhal*) Loc Sys	Derm*) Loc Sys
Product characteristics				
Substance in preparation	No		L	



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Amounts used				
Frequency and duration of use/exposure				
Duration of activity		>4 hours	L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use		Indoors	L	
Surface of skin exposed		Two hands face (480 cm²)		L L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation		No	L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection		Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA				
3.2	Exposure estimation for Distribution and storage			
3.2.1	Exposure estimation for the environment (Distribution and storage)			
3.2.1.1	Environmental releases			
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.				
3.2.1.2	Environmental exposure			
Please see above.				
3.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.				
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
3.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			
Table 18. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment / Explanation Justification	
Inhalation: Long term, Systemic		0.054 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	
3.2.2	Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 19. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	5.421 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	1.371 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**3.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)**

**Table 20. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	16.26 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

formulation)

**3.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation) Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises**

**Table 21. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**3.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Table 22. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	
3.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities		

Table 23. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	
3.2.2	Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing)。		

Table 24. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	
3.2.2	Exposure estimation for Worker for Use as laboratory reagent		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 25. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**3.2.2 Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises****Table 26. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**3.2.2 Exposure estimation for Worker for Industrial spraying****Table 27. Summary of exposure concentrations for contributing scenario: Industrial spraying**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	325.3 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	42.86 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**3.2.2 Exposure estimation for Worker for Production of preparations\* or articles by tableting, compression, extrusion, pelletisation**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 28. Summary of exposure concentrations for contributing scenario: Production of preparations\* or articles by tableting, compression, extrusion, pelletisation**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.5 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	3.429 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 4**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
4.1	Short title of the exposure scenario	Industrial end-use stage: Adhesives and sealants

**Industrial end-use stage****Market sector:****Environment:**

ERC 5

**Worker**

Use in closed process, no likelihood of exposure

PROC 1

Use in closed, continuous process with occasional controlled exposure

PROC 2

Use in closed batch process (synthesis or formulation)

PROC 3

Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC 5

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8a

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 8b

Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC 9

Roller application or brushing

PROC 10

Use as laboratory reagent

PROC 15

**Operational conditions and risk management measures****Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed process, no likelihood of exposure	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed, continuous process with occasional controlled exposure		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]</b>					
				Derm*)	
			Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed batch process (synthesis or formulation)		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]</b>					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>					
		Inhal*)		Derm*)	
			Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>					
		Inhal*)		Derm*)	



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]</b>					
		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Roller application or brushing" [PROC 10]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Use as laboratory reagent" [PROC 15]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

4.2	Exposure estimation for Industrial end-use stage
4.2.1	Exposure estimation for the environment (Not relevant)
4.2.1.1	Environmental releases
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.	
4.2.1.2	Environmental exposure

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Please see above.				
4.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
4.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			
Table 29. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		0.054 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	
4.2.2	Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure			
Table 30. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		5.421 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.2 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		1.371 mg/kg bw/day	Method: TRA workers Name: TRA workers	
4.2.2	Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 31. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	16.26 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

formulation)

4.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation) Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises

**Table 31. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

4.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

**Table 32. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

4.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 33. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**4.2.2 Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing).**

**Table 34. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**4.2.2 Exposure estimation for Worker for Roller application or brushing**

**Table 35. Summary of exposure concentrations for contributing scenario: Roller application or brushing**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**4.2.2 Exposure estimation for Worker for Use as laboratory reagent**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 36. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 5**

Substance / User identity		
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
5.1	Short title of the exposure scenario	Professional end-use stage: Adhesives and sealants

**Professional end-use stage****Market sector:****Sector of use:**

SU 0 - Other

SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Environment:**

ERC 8c, ERC 8f

**Worker**

Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 5

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8a

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 8b

Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 9

Roller application or brushing PROC 10

Use as laboratory reagent PROC 15

Hand-mixing with intimate contact and only PPE available PROC 19

**Operational conditions and risk management measures****Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]**

		Inhal*)		Derm*)	
		Sys	Loc	Sys	
Product characteristics					
Substance in preparation	No	L			
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L	
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L	L	L	
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					

<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					

<b>Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]</b>	
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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Roller application or brushing" [PROC 10]</b>					
				Derm*)	
				Sys	Loc Sys
Product characteristics					
Substance in preparation	No		L		
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Use as laboratory reagent" [PROC 15]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Substance in preparation	No	L			
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	One hand face only (240 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L		L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Hand-mixing with intimate contact and only PPE available" [PROC 19]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No	L			
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	Two hands and forearms (1980 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L		L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					
5.2	Exposure estimation for Professional end-use stage				
5.2.1	Exposure estimation for the environment (Professional end-use stage)				
5.2.1.1	Environmental releases				
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.					
5.2.1.2	Environmental exposure				
Please see above.					
5.2.1.3	Indirect exposure of humans via the environment				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.				
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
5.2.2	Exposure estimation for Worker for Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)			
Table 37. Summary of exposure concentrations for contributing scenario: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		54.21 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		2 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	
5.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities			
Table 38. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		135.5 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	
5.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 39. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**5.2.2 Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

**Table 40. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**5.2.2 Exposure estimation for Worker for Roller application or brushing**

**Table 41. Summary of exposure concentrations for contributing scenario: Roller application or brushing**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	135.5 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**5.2.2 Exposure estimation for Worker for Use as laboratory reagent**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 42. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**5.2.2 Exposure estimation for Worker for Hand-mixing with intimate contact and only PPE available****Table 43. Summary of exposure concentrations for contributing scenario: Hand-mixing with intimate contact and only PPE available**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	135.5 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	5 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	141.4 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 6**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
6.1	Short title of the exposure scenario	Consumer end-use: Adhesives and sealants
<b>Consumer end-use</b>		
<b>Market sector:</b>		
<b>Environment:</b> ERC 8c, ERC 8f, ERC 10a, ERC 11a		
<b>Consumer</b>		
<b>Operational conditions and risk management measures</b>		
6.2	Exposure estimation for Consumer end-use	
6.2.1	Exposure estimation for the environment (Consumer end-use)	
6.2.1.1	Environmental releases	
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.		
6.2.1.2	Environmental exposure	
Please see above.		
6.2.1.3	Indirect exposure of humans via the environment	
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.		
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 7**

	Substance / User identity		
	Registration number(s)	01-2119486476-24-0004	
	Substance identity	CAS#544-17-2, EC# 208-863-7	
7.1	Short title of the exposure scenario	Professional end-use stage: Fillers and putties	
Professional end-use stage			
Market sector:			
PC 9b - Fillers, Putties			
Sector of use:			
SU 0 - Other			
SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)			
Environment:		ERC 8c, ERC 8f	
Worker			
Transfer of substance or preparation into small containers (dedicated filling line, including weighing)		PROC 9	
Roller application or brushing		PROC 10	
Treatment of articles by dipping and pouring		PROC 13	
Operational conditions and risk management measures			

Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]				
		Inhal*)	Derm*)	
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

Control of workers exposure for "Roller application or brushing" [PROC 10]				
		Inhal*)		Derm*)
		Loc	Sys	Loc Sys
Product characteristics				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Treatment of articles by dipping and pouring" [PROC 13]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

7.2	Exposure estimation for Professional end-use stage
7.2.1	Exposure estimation for the environment (Professional end-use stage)
7.2.1.1	Environmental releases
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.	
7.2.1.2	Environmental exposure



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Please see above.																			
7.2.1.3	Indirect exposure of humans via the environment																		
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.																			
7.2.2	Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing)																		
Table 44. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)																			
<table><tr><th>Route of exposure and type of effects</th><th>Exposure concentration</th><th>Method / name of exposure assessment</th><th>Explanation / Justification</th></tr><tr><td>Inhalation: Long term, Systemic</td><td>54.21 mg/m³</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr><tr><td>Dermal: Long term, Local</td><td>1 mg/cm²</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr><tr><td>Dermal: Long term, Systemic</td><td>6.857 mg/kg bw/day</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr></table>				Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification	Inhalation: Long term, Systemic	54.21 mg/m³	Method: TRA workers Name: TRA workers		Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers		Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification																
Inhalation: Long term, Systemic	54.21 mg/m³	Method: TRA workers Name: TRA workers																	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers																	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers																	
7.2.2	Exposure estimation for Worker for Roller application or brushing																		
Table 45. Summary of exposure concentrations for contributing scenario: Roller application or brushing																			
<table><tr><th>Route of exposure and type of effects</th><th>Exposure concentration</th><th>Method / name of exposure assessment</th><th>Explanation / Justification</th></tr><tr><td>Inhalation: Long term, Systemic</td><td>135.5 mg/m³</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr><tr><td>Dermal: Long term, Local</td><td>2 mg/cm²</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr><tr><td>Dermal: Long term, Systemic</td><td>27.43 mg/kg bw/day</td><td>Method: TRA workers Name: TRA workers</td><td></td></tr></table>				Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification	Inhalation: Long term, Systemic	135.5 mg/m³	Method: TRA workers Name: TRA workers		Dermal: Long term, Local	2 mg/cm²	Method: TRA workers Name: TRA workers		Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification																
Inhalation: Long term, Systemic	135.5 mg/m³	Method: TRA workers Name: TRA workers																	
Dermal: Long term, Local	2 mg/cm²	Method: TRA workers Name: TRA workers																	
Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers																	
7.2.2	Exposure estimation for Worker for Treatment of articles by dipping and pouring																		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 46. Summary of exposure concentrations for contributing scenario: Treatment of articles by dipping and pouring**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 8**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
8.1	Short title of the exposure scenario	Consumer end-use: Fillers and putties
<b>Consumer end-use</b>		
<b>Market sector:</b> PC 9b - Fillers, Putties		
<b>Environment:</b> ERC 8c, ERC 8f, ERC 10a, ERC 11a		
<b>Consumer</b>		
<b>Operational conditions and risk management measures</b>		
8.2	Exposure estimation for Consumer end-use	
8.2.1	Exposure estimation for the environment (Consumer end-use)	
8.2.1.1	Environmental releases	
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.		
8.2.1.2	Environmental exposure	
Please see above.		
8.2.1.3	Indirect exposure of humans via the environment	
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.		
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 9**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
9.1	Short title of the exposure scenario	Industrial end-use stage: Mortar
Industrial end-use stage		
Market sector:		
PC 0 - Other		
Sector of use:		
SU 13 - Manufacture of other non-metallic mineral products, e.g. plasters, cement		
n/a		
Environment:		ERC 5
Worker		
Use in closed process, no likelihood of exposure		PROC 1
Use in closed, continuous process with occasional controlled exposure		PROC 2
Use in closed batch process (synthesis or formulation)		PROC 3
Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)		PROC 5
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities		PROC 8a
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities		PROC 8b
Roller application or brushing		PROC 10
Use as laboratory reagent		PROC 15
Treatment of articles by dipping and pouring		PROC 13
Production of preparations or articles by tableting, compression, extrusion, pelletisation		PROC 14
Low energy manipulation of substances bound in materials and/or articles		PROC 21
Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting		PROC 22
Operational conditions and risk management measures		

Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in closed process, no likelihood of exposure		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Conditions and measures related to personal protection, hygiene and health evaluation						
Respiratory protection		Respiratory protection is not used				L
Additional good practice advice beyond the REACH CSA						
<b>Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]</b>						
					Derm*)	
					Sys	Loc Sys
Product characteristics						
Substance in preparation		No		L		
Frequency and duration of use/exposure						
Duration of activity		>4 hours		L		
Human factors not influenced by risk management						
Other given operational conditions affecting workers exposure						
Place of use		Indoors		L		
Surface of skin exposed		Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release						
Level of containment		Use in closed, continuous process with occasional controlled exposure			L	
Technical conditions and measures to control dispersion from source towards the worker						
Local Exhaust Ventilation		No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure						
Conditions and measures related to personal protection, hygiene and health evaluation						
Respiratory protection		Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA						
<b>Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]</b>						
					Inhal*)	
					Derm*)	
					Loc	Sys
					Loc	Sys
Product characteristics						
Substance in preparation		No		L		
Amounts used						
Frequency and duration of use/exposure						
Duration of activity		>4 hours		L		
Human factors not influenced by risk management						
Other given operational conditions affecting workers exposure						
Place of use		Indoors		L		
Surface of skin exposed		One hand face only (240 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release						
Level of containment		Use in closed batch process (synthesis or formulation)			L	
Technical conditions and measures to control dispersion from source towards the worker						
Local Exhaust Ventilation		No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure						
Conditions and measures related to personal protection, hygiene and health evaluation						

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Respiratory protection		Respiratory protection is not used		L	
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]</b>					
		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No	L			
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L		L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No	L			
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	Two hands (960 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L		L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Additional good practice advice beyond the REACH CSA

**Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]**

		Inhal*)	Derm*)	
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Roller application or brushing" [PROC 10]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

<b>Control of workers exposure for "Use as laboratory reagent" [PROC 15]</b>		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					

<b>Control of workers exposure for "Treatment of articles by dipping and pouring" [PROC 13]</b>		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

<b>Control of workers exposure for "Production of preparations or articles by tableting, compression, extrusion, pelletisation" [PROC 14]</b>		Inhal*)		Derm*)	



Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.  
La numerazione delle pagine non è quindi consecutiva a quella della SDS.  
Questo allegato è costituito da 93 pagine.

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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

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Substance in preparation	No	L		
Duration of activity	>4 hours	L		
Place of use	Indoors	L		
Surface of skin exposed	Two hands and forearms (1980 cm <sup>2</sup> )		L	L
Local Exhaust Ventilation	No	L	L	L
Respiratory protection	Respiratory protection is not used	L		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Substance in preparation		No	L	
Amounts used				
Frequency and duration of use/exposure				
Duration of activity		>4 hours	L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Process temperature		Process temp < Melting point	L	
Place of use		Indoors	L	
Surface of skin exposed		Two hands and forearms (1980 cm <sup>2</sup> )	L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation		No	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection		Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA				
9.2	Exposure estimation for Industrial end-use stage			
9.2.1	Exposure estimation for the environment (Not relevant)			
9.2.1.1	Environmental releases			
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.				
9.2.1.2	Environmental exposure			
Please see above.				
9.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
9.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 47. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	0.054 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure****Table 48. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	5.421 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	1.371 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure****Table 49. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or formulation)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	16.26 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 50. Summary of exposure concentrations for contributing scenario: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

**Table 51. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 52. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Roller application or brushing**

**Table 53. Summary of exposure concentrations for contributing scenario: Roller application or brushing**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Use as laboratory reagent**

**Table 54. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**9.2.2 Exposure estimation for Worker for Treatment of articles by dipping and pouring**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 55. Summary of exposure concentrations for contributing scenario: Treatment of articles by dipping and pouring**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

9.2.2	<b>Exposure estimation for Worker for Production of preparations or articles by tableting, compression, extrusion, pelletisation</b>
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**Table 56. Summary of exposure concentrations for contributing scenario: Production of preparations or articles by tableting, compression, extrusion, pelletisation**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.5 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	3.429 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

9.2.2	<b>Exposure estimation for Worker for Low energy manipulation of substances bound in materials and/or articles</b>
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9.2.2	<b>Exposure estimation for Worker for Potentially closed processing operations with minerals/metals at elevated temperature. Industrial setting</b>
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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 10**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
10.1	Short title of the exposure scenario	Professional end-use stage: Mortar

**Professional end-use stage****Market sector:**

PC 0 - Other

**Sector of use:**

SU 0 - Other

SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Environment:**

ERC 8a, ERC 8b, ERC 8c, ERC 8f

**Worker**

Roller application or brushing

PROC 10

Non industrial spraying

PROC 11

Treatment of articles by dipping and pouring

PROC 13

Hand-mixing with intimate contact and only PPE available

PROC 19

**Operational conditions and risk management measures****Control of workers exposure for "Roller application or brushing" [PROC 10]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Non industrial spraying" [PROC 11]**

Inhal\*) Derm\*)  
Loc Sys Loc Sys



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Product characteristics				
Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	1 - 4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands and upper wrists (1500 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

<b>Control of workers exposure for "Treatment of articles by dipping and pouring" [PROC 13]</b>				
		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

<b>Control of workers exposure for "Hand-mixing with intimate contact and only PPE available" [PROC 19]</b>				
		Inhal*)		Derm*)
		Loc	Sys	Loc Sys
Product characteristics				
Substance in preparation	No	L		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Amounts used				
Frequency and duration of use/exposure				
Duration of activity		>4 hours	L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use		Indoors	L	
Surface of skin exposed		Two hands and forearms (1980 cm²)		L L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation		No	L	L L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection		Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA				
10.2	Exposure estimation for Professional end-use stage			
10.2.1	Exposure estimation for the environment (Professional end-use stage)			
10.2.1.1	Environmental releases			
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.				
10.2.1.2	Environmental exposure			
Please see above.				
10.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.				
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
10.2.2	Exposure estimation for Worker for Roller application or brushing			
Table 57. Summary of exposure concentrations for contributing scenario: Roller application or brushing				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic		135.5 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		2 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	
10.2.2	Exposure estimation for Worker for Non industrial spraying			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 58. Summary of exposure concentrations for contributing scenario: Non industrial spraying**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	325.3 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	5 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	107.1 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**10.2.2 Exposure estimation for Worker for Treatment of articles by dipping and pouring****Table 59. Summary of exposure concentrations for contributing scenario: Treatment of articles by dipping and pouring**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**10.2.2 Exposure estimation for Worker for Hand-mixing with intimate contact and only PPE available****Table 60. Summary of exposure concentrations for contributing scenario: Hand-mixing with intimate contact and only PPE available**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	135.5 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	5 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	141.4 mg/kg bw/day	Method: TRA workers Name: TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 11**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
11.1	Short title of the exposure scenario	Consumer end-use: Mortar
<b>Consumer end-use</b>		
<b>Market sector:</b>		
PC 0 - Other		
<b>Environment:</b> ERC 8a, ERC 8b, ERC 8c, ERC 8f, ERC 10a, ERC 11a		
<b>Consumer</b>		
<b>Operational conditions and risk management measures</b>		
11.2	Exposure estimation for Consumer end-use	
11.2.1	Exposure estimation for the environment (Consumer end-use)	
11.2.1.1	Environmental releases	
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.		
11.2.1.2	Environmental exposure	
Please see above.		
11.2.1.3	Indirect exposure of humans via the environment	
<u>Exposure via inhalation</u>		
The environmental exposure concentrations are considered to be negligible.		
<u>Exposure via food consumption: Total daily intake for humans</u>		
The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 12**

Substance / User identity		
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
12.1	Short title of the exposure scenario	Industrial end-use stage: Leather tanning, dye, finishing, impregnation and care products
<b>Industrial end-use stage</b>		
<b>Market sector:</b>		
PC 23 - Leather tanning, dye, finishing, impregnation and care products		
<b>Sector of use:</b>		
SU 5 - Manufacture of textiles, leather, fur		
<b>Environment:</b>		ERC 4, ERC 6b
<b>Worker</b>		
Use in closed process, no likelihood of exposure		PROC 1
Use in closed, continuous process with occasional controlled exposure		PROC 2
Use in closed batch process (synthesis or formulation)		PROC 3
Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)		PROC 5
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities		PROC 8a
Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities		PROC 8b
Roller application or brushing		PROC 10
Use as laboratory reagent		PROC 15
Treatment of articles by dipping and pouring		PROC 13
Use in batch and other process (synthesis) where opportunity for exposure arises		PROC 4
Industrial spraying		PROC 7
Transfer of substance or preparation into small containers (dedicated filling line, including weighing)		PROC 9
<b>Operational conditions and risk management measures</b>		
<b>Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]</b>		
		Inhal*) Derm*)
		Loc Sys Loc Sys
Product characteristics		
Substance in preparation	No	L
Amounts used		
Frequency and duration of use/exposure		
Duration of activity	>4 hours	L
Human factors not influenced by risk management		
Other given operational conditions affecting workers exposure		
Place of use	Indoors	L
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )	L L
Technical conditions and measures at process level (source) to prevent release		
Level of containment	Use in closed process, no likelihood of exposure	L
Technical conditions and measures to control dispersion from source towards the worker		
Local Exhaust Ventilation	No	L L L

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used			L
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Use in closed, continuous process with occasional controlled exposure" [PROC 2]</b>				
				Derm*)
				Sys Loc Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed, continuous process with occasional controlled exposure	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]</b>				
				Inhal*)
				Derm*)
				Loc Sys Loc Sys
Product characteristics				
Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed batch process (synthesis or formulation)	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]</b>				
		Inhal*)	Derm*)	
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>				
		Inhal*)	Derm*)	
		Loc	Sys	Loc
				Sys
Product characteristics				
Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>					
		Inhal*)		Derm*)	
		Sys		Loc	Sys
Product characteristics					
Substance in preparation	No	L			
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors	L			
Surface of skin exposed	Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No	L		L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Roller application or brushing" [PROC 10]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No	L			
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours	L			
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors			L	
Surface of skin exposed	Two hands (960 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used	L			
Additional good practice advice beyond the REACH CSA					



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Control of workers exposure for "Use as laboratory reagent" [PROC 15]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Treatment of articles by dipping and pouring" [PROC 13]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Use in batch and other process (synthesis) where opportunity for exposure arises" [PROC 4]**

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Level of containment	Use in batch and other process (synthesis) where opportunity for exposure arises		L		
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					

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## Allegato con gli scenari espositivi della sostanza: **CALCIO FORMIATO**.

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation		No	L		
Amounts usec					
Frequency and duration of use/exposure					
Duration of activity		>4 hours	L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use		Indoors	L		
Surface of skin exposed		Two hands face (480 cm²)		L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation		No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection		Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA					
12.2	Exposure estimation for Industrial end-use stage				
12.2.1	Exposure estimation for the environment (Not relevant)				
12.2.1.1	Environmental releases				
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.					
12.2.1.2	Environmental exposure				
Please see above.					
12.2.1.3	Indirect exposure of humans via the environment				
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.					
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.					
12.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure				
Table 61. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure					
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment		Explanation / Justification
Inhalation: Long term, Systemic		0.054 mg/m³	Method: TRA workers Name: TRA workers		
Dermal: Long term, Local		0.1 mg/cm²	Method: TRA workers Name: TRA workers		
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers		
12.2.2	Exposure estimation for Worker for Use in closed, continuous process with occasional controlled exposure				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 62. Summary of exposure concentrations for contributing scenario: Use in closed, continuous process with occasional controlled exposure**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	5.421 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	1.371 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2 Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)

**Table 63. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or formulation)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	16.26 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2 Exposure estimation for Worker for Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

**Table 64. Summary of exposure concentrations for contributing scenario: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

12.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities		
Table 65. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	Method: TRA workers Name: TRA workers	
12.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities		
Table 66. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	1 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	Method: TRA workers Name: TRA workers	
12.2.2	Exposure estimation for Worker for Roller application or brushing		
Table 67. Summary of exposure concentrations for contributing scenario: Roller application or brushing			
Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m³	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local	2 mg/cm²	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic	27.43 mg/kg bw/day	Method: TRA workers Name: TRA workers	
12.2.2	Exposure estimation for Worker for Use as laboratory reagent		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 68. Summary of exposure concentrations for contributing scenario: Use as laboratory reagent**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	0.1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2 Exposure estimation for Worker for Treatment of articles by dipping and pouring

**Table 69. Summary of exposure concentrations for contributing scenario: Treatment of articles by dipping and pouring**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2 Exposure estimation for Worker for Use in batch and other process (synthesis) where opportunity for exposure arises

**Table 70. Summary of exposure concentrations for contributing scenario: Use in batch and other process (synthesis) where opportunity for exposure arises**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2 Exposure estimation for Worker for Industrial spraying

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 71. Summary of exposure concentrations for contributing scenario: Industrial spraying**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	325.3 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	42.86 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

12.2.2	Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
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**Table 72. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
Inhalation: Long term, Systemic	27.11 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
Dermal: Long term, Systemic	6.857 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 13**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
13.1	Short title of the exposure scenario	Professional end-use stage: Fertiliser

**Professional end-use stage****Market sector:**

PC 12 - Fertilizers

**Sector of use:**

SU 1 - Agriculture, forestry, fishery

**Environment:**

ERC 8d, ERC 10b

**Worker**

Use in closed process, no likelihood of exposure

PROC 1

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8a

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities

PROC 8b

Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC 9

**Operational conditions and risk management measures****Control of workers exposure for "Use in closed process, no likelihood of exposure" [PROC 1]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed process, no likelihood of exposure	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]**

		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Product characteristics				
Substance in preparation	No	L		
Amounts used				
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities" [PROC 8b]</b>				
		Inhal*) Sys	Derm*) Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	Two hands face (480 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				
<b>Control of workers exposure for "Transfer of substance or preparation into small containers (dedicated filling line, including weighing) " [PROC 9]</b>				
		Inhal*) Loc	Derm*) Sys	Sys
Product characteristics				

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

Substance in preparation		No	L	
Amounts used				
Frequency and duration of use/exposure				
Duration of activity		>4 hours	L	
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use		Indoors	L	
Surface of skin exposed		Two hands face (480 cm <sup>2</sup> )	L	L
Technical conditions and measures at process level (source) to prevent release				
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation		No	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection		Respiratory protection is not used	L	
Additional good practice advice beyond the REACH CSA				
13.2	Exposure estimation for Professional end-use stage			
13.2.1	Exposure estimation for the environment (Professional end-use stage)			
13.2.1.1	Environmental releases			
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.				
13.2.1.2	Environmental exposure			
Please see above.				
13.2.1.3	Indirect exposure of humans via the environment			
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.				
13.2.2	Exposure estimation for Worker for Use in closed process, no likelihood of exposure			
Table 73. Summary of exposure concentrations for contributing scenario: Use in closed process, no likelihood of exposure				
Route of exposure and type of effects		Exposure concentration	Method / name of exposure assessment	
Inhalation: Long term, Systemic		0.054 mg/m <sup>3</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Local		0.1 mg/cm <sup>2</sup>	Method: TRA workers Name: TRA workers	
Dermal: Long term, Systemic		0.343 mg/kg bw/day	Method: TRA workers Name: TRA workers	
13.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities			

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 74. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	135.5 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

13.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
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**Table 75. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	6.857 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

13.2.2	Exposure estimation for Worker for Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 76. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	6.857 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 14**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
14.1	Short title of the exposure scenario	Consumer end-use stage: Fertiliser
<b>Consumer end-use stage [edit]</b>		
<b>Market sector:</b> PC 12 - Fertilizers		
<b>Environment:</b> ERC 8d, ERC 10b		
<b>Consumer</b>		
<b>Operational conditions and risk management measures</b>		
14.2	Exposure estimation for Consumer end-use stage	
14.2.1	Exposure estimation for the environment (Consumer end-use stage)	
14.2.1.1	Environmental releases	
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.		
14.2.1.2	Environmental exposure	
Please see above.		
14.2.1.3	Indirect exposure of humans via the environment	
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.		
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.		

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 15**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
15.1	Short title of the exposure scenario	Industrial end-use stage: Glass and ceramics

**Industrial end-use stage****Market sector:**

PC 0 - Other

**Sector of use:**

SU 0 - Other

SU 3

**Environment:**

ERC 5

**Worker**

Use in closed batch process (synthesis or formulation)

PROC 3

Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)

PROC 5

Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 8a

**Operational conditions and risk management measures****Control of workers exposure for "Use in closed batch process (synthesis or formulation) " [PROC 3]**

		Derm*)		
		Sys	Loc	Sys
Product characteristics				
Substance in preparation	No	L		
Frequency and duration of use/exposure				
Duration of activity	>4 hours	L		
Human factors not influenced by risk management				
Other given operational conditions affecting workers exposure				
Place of use	Indoors	L		
Surface of skin exposed	One hand face only (240 cm <sup>2</sup> )		L	L
Technical conditions and measures at process level (source) to prevent release				
Level of containment	Use in closed batch process (synthesis or formulation)	L		
Technical conditions and measures to control dispersion from source towards the worker				
Local Exhaust Ventilation	No	L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure				
Conditions and measures related to personal protection, hygiene and health evaluation				
Respiratory protection	Respiratory protection is not used	L		
Additional good practice advice beyond the REACH CSA				

**Control of workers exposure for "Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) " [PROC 5]**

		Inhal*)	Derm*)
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**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands face (480 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
<b>Control of workers exposure for "Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities" [PROC 8a]</b>					
		Inhal*)		Derm*)	
		Loc	Sys	Loc	Sys
Product characteristics					
Substance in preparation	No		L		
Amounts used					
Frequency and duration of use/exposure					
Duration of activity	>4 hours		L		
Human factors not influenced by risk management					
Other given operational conditions affecting workers exposure					
Place of use	Indoors		L		
Surface of skin exposed	Two hands (960 cm²)			L	L
Technical conditions and measures at process level (source) to prevent release					
Technical conditions and measures to control dispersion from source towards the worker					
Local Exhaust Ventilation	No		L	L	L
Organisational measures to prevent /limit releases, dispersion and exposure					
Conditions and measures related to personal protection, hygiene and health evaluation					
Respiratory protection	Respiratory protection is not used		L		
Additional good practice advice beyond the REACH CSA					
15.2	Exposure estimation for Industrial end-use stage				
15.2.1	Exposure estimation for the environment (Not relevant)				
15.2.1.1	Environmental releases				
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.					

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

15.2.1.2	Environmental exposure		
Please see above.			
15.2.1.3	Indirect exposure of humans via the environment		
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible. <u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.			
15.2.2	Exposure estimation for Worker for Use in closed batch process (synthesis or formulation)		
<b>Table 77. Summary of exposure concentrations for contributing scenario: Use in closed batch process (synthesis or formulation)</b>			
<b>Route of exposure and type of effects</b>	<b>Exposure concentration</b>	<b>Method / name of exposure assessment</b>	<b>Explanation / Justification</b>
<b>Inhalation:</b> Long term, Systemic	16.26 mg/m³	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	0.1 mg/cm²	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	0.343 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
15.2.2	Exposure estimation for Worker for Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)		
<b>Table 78. Summary of exposure concentrations for contributing scenario: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</b>			
<b>Route of exposure and type of effects</b>	<b>Exposure concentration</b>	<b>Method / name of exposure assessment</b>	<b>Explanation / Justification</b>
<b>Inhalation:</b> Long term, Systemic	27.11 mg/m³	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm²	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
15.2.2	Exposure estimation for Worker for Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities		



**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Table 79. Summary of exposure concentrations for contributing scenario: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	54.21 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	1 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	13.71 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 16**

	Substance / User identity	
	Registration number(s)	01-2119486476-24-0004
	Substance identity	CAS#544-17-2, EC# 208-863-7
16.1	Short title of the exposure scenario	Service life stage (consumers): Glass and ceramics
<b>Service life stage (consumers)</b>		
<b>Market sector:</b> PC 0 - Other		
<b>Environment:</b> ERC 10a, ERC 11a		
<b>Consumer</b>		
<b>Operational conditions and risk management measures</b>		
16.2	Exposure estimation for Service life stage (consumers)	
16.2.1	Exposure estimation for the environment (Service life stage (consumers))	
16.2.1.1	Environmental releases	
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.		
16.2.1.2	Environmental exposure	
Please see above.		
16.2.1.3	Indirect exposure of humans via the environment	
<u>Exposure via inhalation</u> The environmental exposure concentrations are considered to be negligible.		
<u>Exposure via food consumption: Total daily intake for humans</u> The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.		

Questo allegato è costituito da 93 pagine.

	Substance / User identity																																																																	
	Registration number(s)	01-2119486476-24-0004																																																																
	Substance identity	CAS#544-17-2, EC# 208-863-7																																																																
17.1	Short title of the exposure scenario	Professional end-use stage: Washing and cleaning products; health services																																																																
<b>Professional end-use stage</b> <b>Market sector:</b> PC 35 - Washing and Cleaning Products (including solvent based products) <b>Sector of use:</b> SU 20 - Health services <b>Environment:</b> ERC 8a <b>Worker</b> Professional use [edit] PROC 10 <b>Operational conditions and risk management measures</b>																																																																		
<b>Control of workers exposure for "Professional use [edit]" [PROC 10]</b> <table border="1"> <thead> <tr> <th></th> <th></th> <th>Sys</th> <th>Derm*) Loc Sys</th> </tr> </thead> <tbody> <tr> <td colspan="4">Product characteristics</td> </tr> <tr> <td>Substance in preparation</td> <td>No</td> <td>L</td> <td></td> </tr> <tr> <td colspan="4">Frequency and duration of use/exposure</td> </tr> <tr> <td>Duration of activity</td> <td>&gt;4 hours</td> <td>L</td> <td></td> </tr> <tr> <td colspan="4">Human factors not influenced by risk management</td> </tr> <tr> <td colspan="4">Other given operational conditions affecting workers exposure</td> </tr> <tr> <td>Place of use</td> <td>Indoors</td> <td>L</td> <td></td> </tr> <tr> <td>Surface of skin exposed</td> <td>Two hands (960 cm<sup>2</sup>)</td> <td></td> <td>L L</td> </tr> <tr> <td colspan="4">Technical conditions and measures at process level (source) to prevent release</td> </tr> <tr> <td colspan="4">Technical conditions and measures to control dispersion from source towards the worker</td> </tr> <tr> <td>Local Exhaust Ventilation</td> <td>No</td> <td>L</td> <td>L L</td> </tr> <tr> <td colspan="4">Organisational measures to prevent /limit releases, dispersion and exposure</td> </tr> <tr> <td colspan="4">Conditions and measures related to personal protection, hygiene and health evaluation</td> </tr> <tr> <td>Respiratory protection</td> <td>Respiratory protection is not used</td> <td>L</td> <td></td> </tr> <tr> <td colspan="4">Additional good practice advice beyond the REACH CSA</td> </tr> </tbody> </table>					Sys	Derm*) Loc Sys	Product characteristics				Substance in preparation	No	L		Frequency and duration of use/exposure				Duration of activity	>4 hours	L		Human factors not influenced by risk management				Other given operational conditions affecting workers exposure				Place of use	Indoors	L		Surface of skin exposed	Two hands (960 cm <sup>2</sup> )		L L	Technical conditions and measures at process level (source) to prevent release				Technical conditions and measures to control dispersion from source towards the worker				Local Exhaust Ventilation	No	L	L L	Organisational measures to prevent /limit releases, dispersion and exposure				Conditions and measures related to personal protection, hygiene and health evaluation				Respiratory protection	Respiratory protection is not used	L		Additional good practice advice beyond the REACH CSA			
		Sys	Derm*) Loc Sys																																																															
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17.2	Exposure estimation for Professional end-use stage																																																																	
17.2.1	Exposure estimation for the environment (Professional end-use stage)																																																																	
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17.2.1.2	Environmental exposure																																																																	
Please see above.																																																																		
17.2.1.3	Indirect exposure of humans via the environment																																																																	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure via inhalation**

The environmental exposure concentrations are considered to be negligible.

**Exposure via food consumption: Total daily intake for humans**

The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.

17.2.2 Exposure estimation for Worker for Professional use

**Table 80. Summary of exposure concentrations for contributing scenario: Professional use**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	135.5 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	27.43 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure scenario 18**

Substance / User identity	
Registration number(s)	01-2119486476-24-0004
Substance identity	CAS#544-17-2, EC# 208-863-7
18.1	Short title of the exposure scenario Professional end-use stage: Washing and cleaning products; Public domain
<b>Professional end-use stage</b>	
<b>Market sector:</b>	
PC 35 - Washing and Cleaning Products (including solvent based products)	
<b>Sector of use:</b>	
SU 0 - Other	
SU 22	
<b>Environment:</b>	ERC 8a
<b>Worker</b>	
Professional use	PROC 10
<b>Operational conditions and risk management measures</b>	
<b>Control of workers exposure for "Professional use" [PROC 10]</b>	
	Derm*)
	Sys Loc Sys
Product characteristics	
Substance in preparation	No L
Frequency and duration of use/exposure	
Duration of activity	>4 hours L
Human factors not influenced by risk management	
Other given operational conditions affecting workers exposure	
Place of use	Indoors L
Surface of skin exposed	Two hands (960 cm <sup>2</sup> ) L L
Technical conditions and measures at process level (source) to prevent release	
Technical conditions and measures to control dispersion from source towards the worker	
Local Exhaust Ventilation	No L L L
Organisational measures to prevent /limit releases, dispersion and exposure	
Conditions and measures related to personal protection, hygiene and health evaluation	
Respiratory protection	Respiratory protection is not used L
Additional good practice advice beyond the REACH CSA	
18.2	Exposure estimation for Professional end-use stage
18.2.1	Exposure estimation for the environment (Professional end-use stage)
18.2.1.1	Environmental releases
In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) an exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment and therefore, no environmental exposure assessment is performed.	
18.2.1.2	Environmental exposure
Please see above.	
18.2.1.3	Indirect exposure of humans via the environment

**Allegato con gli scenari espositivi della sostanza: *CALCIO FORMIATO*.**

Gli scenari di esposizione sono stati estratti dalla Scheda Di Sicurezza del produttore.

La numerazione delle pagine non è quindi consecutiva a quella della SDS.

Questo allegato è costituito da 93 pagine.

**Exposure via inhalation**

The environmental exposure concentrations are considered to be negligible.

**Exposure via food consumption: Total daily intake for humans**

The chemical is water soluble, readily biodegradable and does not accumulate in the food chain. Therefore secondary poisoning and exposure via the food chain are not relevant.

18.2.2 Exposure estimation for Worker for Professional use

**Table 81. Summary of exposure concentrations for contributing scenario: Professional use**

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Long term, Systemic	135.5 mg/m <sup>3</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Local	2 mg/cm <sup>2</sup>	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	
<b>Dermal:</b> Long term, Systemic	27.43 mg/kg bw/day	<b>Method:</b> TRA workers <b>Name:</b> TRA workers	