Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name **CYTREAT® 485**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Additive for paper mill**

Identified Uses	Industrial	Professional	Consumer
Additive for paper mill	✓	-	-
Additive for paper mill	✓	-	-
Uses Advised Against			
Any use not included among those recommended			

1.3. Details of the supplier of the safety data sheet

Name **N.C.R. BIOCHEMICAL S.P.A.**
Full address **Via dei Carpentieri, 8-Zona Industriale il Prato**
District and Country **40050 Castello d'Argile (BO)**
Italia
Tel. +39 051 6869611 Lun-Ven 8.30-13.00/14.00-16.30
Fax +39 051 6869617

e-mail address of the competent person responsible for the Safety Data Sheet **regulatory@ncr-biochemical.com**

1.4. Emergency telephone number

For urgent inquiries refer to **Italy:**
CAV Ospedale Niguarda Ca' Granda - Milano 02 66101029
CAV Azienda Ospedaliera Papa Giovanni XXII - Bergamo 800 883300
CAV Centro Nazionale di Informazione Tossicologica - Pavia 0382 24444
CAV Az. Osp. Careggi - Firenze 055 7947819
CAV Policlinico Gemelli - Roma 06 3054343
CAV Policlinico Umberto I - Roma 06 49978000
CAV Osp. Pediatrico Bambino Gesù - Roma 06 68593726
CAV Az. Osp. Cardarelli - Napoli 081 7472870
CAV Az. Osp. Univ. Foggia - Foggia 800183459

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

SECTION 2. Hazards identification ... / >>

Signal words: --

Hazard statements:

H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains: 1,2-benzisothiazol-3(2H)-one
2,2'-iminodes(ethylamine)
May produce an allergic reaction.

Precautionary statements:

P273 Avoid release to the environment.

P391 Collect spillage.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification		x = Conc. %	Classification (EC) 1272/2008 (CLP)
CARBOXAMIDE DERIVATIVE			
INDEX		10 ≤ x < 15	**Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1**
EC			
CAS			
REACH Reg.	*Polymer*		
Polyamide amine			
INDEX		2,5 ≤ x < 3	**Aquatic Chronic 2 H411**
EC			
CAS			
REACH Reg.	*Polymer*		
2,2'-iminodes(ethylamine)			
INDEX	*612-058-00-X*	0,1 ≤ x < 0,25	**Acute Tox. 2 H330, Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1B H317**
EC	*203-865-4*		**LD50 Oral: 1553 mg/kg, LD50 Dermal: 1045 mg/kg, STA Inhalation vapours: 0,501 mg/l**
CAS	*111-40-0*		
REACH Reg.	*1-2119473793-27-XXXX*		
1,2-benzisothiazol-3(2H)-one			
INDEX	*613-088-00-6*	0 ≤ x < 0,05	**Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 2 H411**
EC	*220-120-9*		**Skin Sens. 1 H317: ≥ 0,05%**
CAS	*2634-33-5*		**LD50 Oral: 490 mg/kg, STA Inhalation mists/powders: 0,051 mg/l**
REACH Reg.	*EXEMPTED – Art. 15 (2) of REACH regulation*		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

SECTION 4. First aid measures ... / >>

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering

SECTION 7. Handling and storage ... / >>

places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 12

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits are listed below when they exist.

Regulatory References:

DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	ACGIH 2022

SECTION 8. Exposure controls/personal protection ... / >>

2,2'-iminodes(ethylamine)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	DNK	4	1	8	2	SKIN
VLA	ESP	4,3	1			SKIN
VLEP	FRA	4	1			
HTP	FIN	4,3	1	13	3	SKIN
AK	HUN	4		8		SKIN
GVI/KGVI	HRV	4,3	1			
TLV	NOR	4	1			SKIN
NDS/NDSCh	POL	4		12		SKIN
TLV	ROU	2	0,5	4	1	SKIN
NGV/KGV	SWE	4,5	1	10 (C)	2 (C)	SKIN
WEL	GBR	4,3	1			SKIN
TLV-ACGIH		4,2	1			SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,56	mg/l
Normal value in marine water	0,056	mg/l
Normal value for fresh water sediment	1072	mg/kg/d
Normal value for marine water sediment	107,2	mg/kg/d
Normal value for marine water, intermittent release	0,32	mg/l
Normal value of STP microorganisms	6	mg/l
Normal value for the terrestrial compartment	7,97	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation		27,5 mg/m3		4,6 mg/m3	2,6 mg/m3	92,1 mg/m3	0,87 mg/m3	15,4 mg/m3
Skin		4,88 mg/kg bw/d		4,88 mg/kg bw/d			1,1 mg/kg bw/d	11,4 mg/kg bw/d

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protection equipment, ensure good ventilation in the workplace through effective local aspiration.
The individual protection devices must bear the CE marking attesting their compliance with the regulations in force.
HAND PROTECTION
The use of protective gloves is recommended (reference EN 374). For the final choice of the work glove material, the process of using the products and any other products deriving from them must also be evaluated. It is also recalled that latex gloves can give rise to sensitization phenomena.
EYE PROTECTION
It is advisable to wear safety glasses (ref EN 166).
SKIN/BODY PROTECTION
Wear protective clothing and safety shoes (see Directive 89/686 / EEC and EN ISO 20344).
RESPIRATORY PROTECTION
In case of insufficient ventilation use adequate respiratory protection.
ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	straw-coloured	
Odour	characteristic	

SECTION 9. Physical and chemical properties ... / >>

Odour threshold		not determined	
Melting point / freezing point		not determined	
Initial boiling point	>	100 °C	
Flammability		not flammable	
Lower explosive limit		not applicable	
Upper explosive limit		not applicable	
Flash point	>	93 °C	Method:ASTM D93
Auto-ignition temperature		not determined	
Decomposition temperature		not determined	
pH		7,5	Method:ITL 70 Remark:Range ± 1,0 Concentration: 100 % Temperature: 20 °C
Kinematic viscosity		47.619 mm2/s	Method:ITL 66 Remark:L1/50RPM Temperature: 27 °C
Dynamic viscosity		50 mPa (27°C\L1\50rpm)	
Solubility		soluble in water	Method:ITL 73
Partition coefficient: n-octanol/water		not determined	
Vapour pressure		not determined	
Density and/or relative density		1,05 ± 0,03 g/ml	Method:ITL 15 B Temperature: 20 °C
Relative vapour density		not determined	
Particle characteristics		not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Evaporation rate	not determined
Explosive properties	the product is not explosive
Oxidising properties	the product is not oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

2,2'-iminodes(ethylamine)
Unless otherwise specified in the following paragraphs, for the substance in question the toxicological data in the following list are intended to be unavailable: acute toxicity, skin corrosion/irritation, serious eye damage/eye irritation, respiratory or skin sensitization, germ cell mutagenicity, carcinogenicity, reproductive toxicity, specific target organ toxicity (STOT) - single exposure, specific target organ toxicity (STOT) - repeated exposure, aspiration hazard.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

CARBOXAMIDE DERIVATIVE

LD50 (Oral):	> 2000 mg/kg Rat Guideline OECD 401

2,2'-iminodes(ethylamine)

LD50 (Dermal):	1045 mg/kg Rabbit
LD50 (Oral):	1553 mg/kg Rat
LC50 (Inhalation vapours):	0,07 mg/l/4h Rat, OECD Guideline 403, reliability 1
STA (Inhalation vapours):	0,501 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

1,2-benzisothiazol-3(2H)-one

LD50 (Dermal):	> 2000 mg/kg Rat, according to OECD Guideline 402, reliability 2
LD50 (Oral):	490 mg/kg Rat, equivalent or similar to OECD Guideline 401, reliability 1
LC50 (Inhalation mists/powders):	1,6 mg/l/4h calculated at the concentration of 20%

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

2,2'-iminodes(ethylamine)
The substance is corrosive to the skin. The test was performed on rabbits, according to BASF-Test, reliability 2.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

SECTION 11. Toxicological information ... / >>

2,2'-iminodes(ethylamine)
Risk of serious eye damage.

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.
Contains:
1,2-benzisothiazol-3(2H)-one
2,2'-iminodes(ethylamine)

Skin sensitization

2,2'-iminodes(ethylamine)
The substance is a skin sensitizer. Test performed on mice in accordance with OECD Guideline 429, reliability 1.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

2,2'-iminodes(ethylamine)
The substance did not show genotoxic properties in most in vitro and in vivo mutagenicity studies.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

2,2'-iminodes(ethylamine)
Based on available data, the classification criteria are not met. The substance is not carcinogenic.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

2,2'-iminodes(ethylamine)
No effects related to exposure to the substance were observed in the P and F1 generations (data from read-across on rat according to OECD Guideline 421).

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

2,2'-iminodes(ethylamine)
May irritate the respiratory tract

Target organs

2,2'-iminodes(ethylamine)
Respiratory tract

Route of exposure

2,2'-iminodes(ethylamine)
Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

CARBOXAMIDE DERIVATIVE
CI50 > 100 mg/l (3 h, mixed liquor), OECD TG 209

1,2-benzisothiazol-3(2H)-one	
LC50 - for Fish	2,15 mg/l/96h Cyprinodon variegatus, EPA 540/9-85-006, reliability 1
EC50 - for Crustacea	2,9 mg/l/48h Daphnia magna, according to OECD Guideline 202, reliability 1
EC50 - for Algae / Aquatic Plants	0,0403 mg/l/72h Pseudokirchneriella subcapitata, according to OECD Guideline 201, reliability 1
Chronic NOEC for Algae / Aquatic Plants	0,11 mg/l Pseuriella subcapitata, according to OECD Guideline 201, reliability 1
CARBOXAMIDE DERIVATIVE	
LC50 - for Fish	2 mg/l/96h Oncorhynchus mykiss, Guideline OECD 203
LC10 for Fish	1 mg/l/96h LC0 test, Oncorhynchus mykiss, Guideline OECD 203
2,2'-iminodes(ethylamine)	
LC50 - for Fish	430 mg/l/96h Poecilia reticulata, according to EU Method C.1, reliability 2
EC50 - for Crustacea	64,6 mg/l/48h Daphnia magna, according to EU Method C.2, reliability 2
EC50 - for Algae / Aquatic Plants	1164 mg/l/72h Raphidocelis subcapitata, OECD Guideline 201, reliability 2
Chronic NOEC for Fish	> 10 mg/l Gasterosteus aculeatus, OECD Guideline 210, reliability 2
Chronic NOEC for Crustacea	5,6 mg/l Daphnia magna, according to EU Method C.20, reliability 2
Polyamide amine	
LC50 - for Fish	3,16 mg/l/96h Branchydanio rerio, OECD 203
EC50 - for Crustacea	> 25 mg/l/48h Daphnia magna, OECD 202
EC50 - for Algae / Aquatic Plants	2,8 mg/l/72h Scenedesmus

12.2. Persistence and degradability

1,2-benzisothiazol-3(2H)-one	
Rapidly degradable	
CARBOXAMIDE DERIVATIVE	
NOT rapidly degradable	4% Dissolved organic carbon, 27d, OECD 303A
2,2'-iminodes(ethylamine)	
Solubility in water	1000 g/l at 25 °C
Rapidly degradable	87%, 21d, OECD 301D
Polyamide amine	
NOT rapidly degradable	<10%, Closed bottle / OECD TG 301 D

12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one	
Partition coefficient: n-octanol/water	0,7 Log Kow OECD 117, S 324
BCF	6,95 - OECD 305, S 2243
2,2'-iminodes(ethylamine)	
Partition coefficient: n-octanol/water	-5,58 at 20°C pH 7

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

SECTION 12. Ecological information ... / >>

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (derived carboxamide)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (derived carboxamide)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (derived carboxamide)

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9

14.4. Packing group

ADR / RID, IMDG, IATA: III

SECTION 14. Transport information ... / >>

14.5. Environmental hazards

ADR / RID:	Environmentally Hazardous
IMDG:	Marine Pollutant
IATA:	Environmentally Hazardous

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 L	Tunnel restriction code: (-)
	Special provision: 274, 335, 375, 601		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Passengers:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197, A215	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3
Contained substance
Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK 2: Hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H330	Fatal if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

SECTION 16. Other information ... / >>

9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
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- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
02 / 03 / 04 / 07 / 08 / 09 / 11 / 12 / 14 / 16.