

SAFETY DATA SHEET

Aluminium Paste Non Leafing

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

1.1 Product identifier

Product name	: Aluminium Paste Non Leafing
Date of issue	: July 7, 2021
Version	: 7.02
Other names	: A Series A1590; A1590G; A2291FG; A7255; A7260; A7262; A7290; AE2250; AE7474 CF Series CF12; CF16; CF20; CF48 E Series E263AR; E299AR; E428AR; E588AR; E666AR; E666ST; E693AR E1129AR; E1130AR; E1131AR; E1145; E1147AR; E1745AR; E1757AR; E1772; E2104AR; E2107AR; E2128AR; E2136; E2140; E2141; E2152; E2154; E2157; E2169; E2170; E2179; E2478; E2503AR; E2506AR; E2507AR; E2519; E2523; E2525; E2556AR; E2558AR; E2559AR; E2567ST; E2900; E2992; E2994; E2998AR; E3054; E3144AR; E3176AR; E3183 L Series L581AR L20044; L20181; L20245; L20257; L20328; L20564; L20714; L20721; L20740; L20810; L20916; L20957; L20976; L21014; L21048; L21053; L21069; L21070; L21086; L21102; L21121; L21130; L21142; L21149; L21163; L21172; L21213; L21234; L21248; L21334; L21340; L21419; L21474; L21479; L21695; L21790; L21794; L21957; L22181; L22313; L22745 Silver Star Series SILVER STAR 012; SILVER STAR 015; SILVER STAR 018 SD Series SD12; SD17; SD21; SD30 Sparkle Silver Series SPARKLE SILVER E3000AR; SPARKLE SILVER E3122AR; SPARKLE SILVER E3130AR; SPARKLE SILVER E3166AR; SPARKLE SILVER E3199AR; SPARKLE SILVER E3622; SPARKLE SILVER E3622P; SPARKLE SILVER E5000AR; SPARKLE SILVER E5245AR; SPARKLE SILVER E5306AR; SPARKLE SILVER E5500; SPARKLE SILVER E7000AR; SPARKLE SILVER 3000AR; SPARKLE SILVER 3122AR; SPARKLE SILVER 3130AR; SPARKLE SILVER 3141ST; SPARKLE SILVER 3333AR; SPARKLE SILVER 3334AR; SPARKLE SILVER 3400AR; SPARKLE SILVER 3500; SPARKLE SILVER 3641; SPARKLE SILVER 3666; SPARKLE SILVER 7005AR; SPARKLE SILVER 7500 Sparkle Silver Premier Series SPARKLE SILVER PREMIER 303AR; SPARKLE SILVER PREMIER 313AR; SPARKLE SILVER PREMIER 353; SPARKLE SILVER PREMIER E 354; SPARKLE SILVER PREMIER 354; SPARKLE SILVER PREMIER 404AR; SPARKLE SILVER PREMIER E504AR; SPARKLE SILVER PREMIER E 554; SPARKLE SILVER PREMIER 566

Aluminium Paste Non Leafing

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

Unique Formula Identifier (UFI) : Not available

Product description : Not available.

Product type : Solid.

Other means of identification : Not available.

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

Identified uses
Hydrocarbons C9-C11 n-alkanes, isoalkanes, cyclics, <25 aromatics Hydrocarbons C9 Aromatics Aluminium All registered with ECHA for the following REACH uses. This is a non-exhaustive list. Use in Coatings - Industrial PROC1, PROC10, PROC13, PROC14, PROC15, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9 (SU3) Use in Coatings - Professional PROC1, PROC10, PROC11, PROC13, PROC15, PROC19, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b (SU22) Use in Coatings - Consumer PC01,PC04,PC08,PC09A,PC09B,PC09C,PC15,PC18,PC23,PC24,PC31,PC34 (SU21) Formulation and (re)packing of substances and mixtures Use in laboratories Consumer application of coatings

1.3 Details of the supplier of the safety data sheet

Manufacturer : Silberline Ltd.
Banbeath Road
Leven, Fife
KY8 5HD, UK

e-mail address of person responsible for this SDS : sdseu@silberline.com

National contact

1.4 Emergency telephone number

Telephone number : For Chemical Emergency (spill, leak, exposure or incident) call INFOTRAC, 24-hour number 1-800-535-5053 or +1-352-323-3500(outside USA)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

STOT SE 3, H336

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Aluminium Paste Non Leafing

SECTION 2: Hazards identification

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P261 - Avoid breathing dust.

Response

: P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Storage

: P405 - Store locked up.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: Aluminium Paste Non Leafing

Supplemental label elements

: EUH066 Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

: Not applicable.

Tactile warning of danger

: Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Aluminium powder (stabilized)	REACH #: 01-2119529243-45 EC: 231-072-3	≥50 - ≤75	Flam. Sol. 1, H228	[2]
Hydrocarbons, C9, aromatics	CAS: 7429-90-5 REACH #: 01-2119455851-35 EC: 918-668-5	≥10 - ≤20	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1] [2]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5	≥10 - ≤20	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1]

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SECTION 3: Composition/information on ingredients

			See Section 16 for the full text of the H statements declared above.	
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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
 - nausea or vomiting
 - headache
 - drowsiness/fatigue
 - dizziness/vertigo
 - unconsciousness

SECTION 4: First aid measures

- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Water. Carbon dioxide. Halogenated hydrocarbon.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

SECTION 6: Accidental release measures

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482

SECTION 8: Exposure controls/personal protection

(Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state

: Solid. [Paste.]

Color

: Silvery. [Light]

Odor

: Aromatic. [Slight]

Odor threshold

: Not available.

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SECTION 9: Physical and chemical properties

pH	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Lower: 0.9% Upper: 7%
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.38 to 1.75
Solubility(ies)	: Not available.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: 230°C
Decomposition temperature	: Not available.
Viscosity	: Not available.
Explosive properties	: Not available.
Oxidizing properties	: Not available.

9.2 Other information

Solubility in water	: Not available.
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SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary	: Not available.
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Acute toxicity estimates

Not available.

Irritation/Corrosion

Conclusion/Summary	: Not available.
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Sensitization

Conclusion/Summary	: Not available.
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SECTION 11: Toxicological information

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Aluminium Paste Non Leafing	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

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SECTION 11: Toxicological information

Not available.

Conclusion/Summary	: Not available.
General	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
16 03 05*	organic wastes containing hazardous substances

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SECTION 13: Disposal considerations

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

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SECTION 15: Regulatory information

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

WGK Hazard class for water

WGK=2

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
Malaysia	: All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: All components are listed or exempted.
United States	: All components are listed or exempted.
Viet Nam	: All components are listed or exempted.

California Prop. 65



WARNING: This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Lead	Yes.	Yes.

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

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SECTION 15: Regulatory information

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list_of_competent_authorities_and_national_contact_points_en.pdf.

15.2 Chemical Safety Assessment

: Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
STOT SE 3, H336 Aquatic Chronic 3, H412	Expert judgment Expert judgment

Full text of abbreviated H statements

H336 H412	May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]

Aquatic Chronic 3, H412 EUH066 STOT SE 3, H336	AQUATIC HAZARD (LONG-TERM) - Category 3 Repeated exposure may cause skin dryness or cracking. SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
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Date of previous issue : 6/11/2021

Version : 7.02

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

The information provided is based upon data furnished by our suppliers and data determined by us in our facilities at the time this product was formulated. While believed to be reliable, the information and products are intended for use by skilled persons at their own risk. Users should make their own investigation to determine suitability of the information or products for their own particular purposes. Seller assumes no responsibility to Buyer for events resulting or damages incurred from their use.

The Hazardous Materials Identification System (HMIS) has been included by Silberline Manufacturing Co., Inc. in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developer of this rating system and suppliers of Silberline's raw materials, together with Silberline's interpretation of the available data.

Aluminium Paste Non Leafing

SECTION 16: Other information

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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Product name : EU APNL Non DG

Section 1 - Title

Short title of the exposure scenario : EU APNL ES Formulation and repacking

List of use descriptors : **Identified use name:** Formulation and (re)packing of substances and mixtures
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC14, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03, SU10
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02

Environmental contributing scenarios :

Health Contributing scenarios : **General exposures (closed systems)** - PROC01, PROC02, PROC03
Material storage - PROC01, PROC02
Production of preparation or articles by tableting, compression, extrusion or pelletisation - PROC14
Equipment cleaning and maintenance - PROC08a
Drum/batch transfers - PROC08b
Drum and small package filling - PROC09
Transfer from/pouring from containers - PROC08a
Mixing operations (open systems) - PROC05
Laboratory activities - PROC15
Process sampling - PROC03
Bulk transfers - PROC08b
Batch processes at elevated temperatures - PROC03
General exposures (open systems) - PROC04

Processes and activities covered by the exposure scenario : Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities. Covers the use of surface coatings and binders within closed or contained systems, including incidental exposures during material transfers and filling operations. Formulation of the substance and its mixtures in batch or continuous operations within closed or contained systems, including incidental exposures during storage, materials transfers, mixing, maintenance, sampling and associated laboratory activities. Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities. Mixing of solids and liquids in batch formulation of coatings, cleaners, plastic compounds, dyestuffs etc. Use in polymer production Processing of formulated polymers including material transfers, moulding and forming activities, material re-works and associated maintenance. Sampling via open handling. Use of the substance within laboratory settings, including material transfers and equipment cleaning.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

Concentration of substance in mixture or article	: Covers percentage substance in the product up to 100%
Amounts used	: Continuous use/release
Frequency and duration of use	: Covers daily exposures up to 8 hours
Other conditions affecting environmental exposure	: Release fraction to air from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements)0.01 Release fraction to wastewater from process (initial release prior to RMM)0.0002 Release fraction to soil from process (initial release prior to RMM)0.0001
Technical conditions and measures at process level (source) to prevent release	: Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil	: Risk from environmental exposure is driven by freshwater sediment. Prevent discharge of undissolved substance to or recover from onsite wastewater. No wastewater treatment required. Treat air emission to provide a typical removal efficiency of0 Treat on-site wastewater (prior to receiving water discharge) to provide the required removal efficiency of0 If discharging to municipal sewage treatment plant, provide the required on-site wastewater removal efficiency of0
Conditions and measures related to sewage treatment plant	: Estimated substance removal from wastewater via on-site sewage treatment>95% Total efficiency of removal from wastewater after on-site and off-site (municipal treatment plant) RMMs>95% Maximum allowable site tonnage (M _{Safe}) based on release following total wastewater treatment removal100000 Assumed on-site sewage treatment plant flow2000

Contributing scenario controlling worker exposure for 2: General exposures (closed systems)

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls	: Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 3: Material storage

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls	: Store substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Production of preparation or articles by tableting, compression, extrusion or pelletisation

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Handle substance within a predominantly closed system provided with extract ventilation.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 5: Equipment cleaning and maintenance

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Drain down and flush system prior to equipment break-in or maintenance.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Drum/batch transfers

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 7: Drum and small package filling

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Fill containers/cans at dedicated fill points supplied with local extract ventilation.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 8: Transfer from/pouring from containers

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 9: Mixing operations (open systems)

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 10: Laboratory activities

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 11: Process sampling

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 12: Bulk transfers

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls	: Provide enhanced general ventilation by mechanical means.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 13: Batch processes at elevated temperatures

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls	: Formulate in enclosed or ventilated mixing vessels.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 14: General exposures (open systems)

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website:	: Not applicable.
Exposure estimation and reference to its source - Environment: 1:	
Exposure assessment (environment):	: Hydrocarbon Block Method (Petrorisk)
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: General exposures (closed systems)	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 3: Material storage	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 4: Production of preparation or articles by tableting, compression, extrusion or pelletisation	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 5: Equipment cleaning and maintenance	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 6: Drum/batch transfers	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 7: Drum and small package filling	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 8: Transfer from/pouring from containers	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2
Exposure estimation and reference to its source - Workers: 9: Mixing operations (open systems)	
Exposure assessment (human):	: Not available.
Exposure estimation and reference to its source	: ECETOC TRA consumer v2

Exposure estimation and reference to its source - Workers: 10: Laboratory activities

Exposure assessment (human): : Not available.

Exposure estimation and reference to its source : ECETOC TRA consumer v2

Exposure estimation and reference to its source - Workers: 11: Process sampling

Exposure assessment (human): : Not available.

Exposure estimation and reference to its source : ECETOC TRA consumer v2

Exposure estimation and reference to its source - Workers: 12: Bulk transfers

Exposure assessment (human): : Not available.

Exposure estimation and reference to its source : ECETOC TRA consumer v2

Exposure estimation and reference to its source - Workers: 13: Batch processes at elevated temperatures

Exposure assessment (human): : Not available.

Exposure estimation and reference to its source : ECETOC TRA consumer v2

Exposure estimation and reference to its source - Workers: 14: General exposures (open systems)

Exposure assessment (human): : Not available.

Exposure estimation and reference to its source : ECETOC TRA consumer v2

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.
Health	: Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measure/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measure/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Product name : EU APNL Non DG

Section 1 - Title

Short title of the exposure scenario : EU APNL ES Coatings

List of use descriptors : **Identified use name:** Use in coatings
Process Category: PROC10, PROC15, Not applicable., PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC13
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC04

Environmental contributing scenarios :

Health Contributing scenarios : **General exposures (closed systems)**
General exposures (open systems)
Film formation - air drying
Film formation - force drying (50 - 100°C). Stoving (>100°C). UV/EB radiation curing
Mixing operations
Preparation of material for application
Spraying (automatic/robotic)
Production of preparation or articles by tableting, compression, extrusion or pelletisation
Transfer from/pouring from containers
Drum/batch transfers
Laboratory activities
Dipping, immersion and pouring
Roller, spreader, flow application
Material transfers
Spraying

Processes and activities covered by the exposure scenario : Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

Frequency and duration of use : Continuous release Emission days300

Other conditions affecting environmental exposure : Release fraction to air from process (initial release prior to RMM)0.98 Release fraction to wastewater from process (initial release prior to RMM)0.0007 Release fraction to soil from process (initial release prior to RMM)0

Technical conditions and measures at process level (source) to prevent release : Common practices vary across sites thus conservative process release estimates used.

Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Risk from environmental exposure is driven by freshwater sediment. Prevent discharge of undissolved substance to or recover from onsite wastewater. If discharging to municipal sewage treatment plant, no on-site wastewater treatment required. Treat air emission to provide a typical removal efficiency of

Conditions and measures related to sewage treatment plant : Estimated substance removal from wastewater via on-site sewage treatment 93.6
Total efficiency of removal from wastewater after on-site and off-site (municipal treatment plant) RMMs 93.6 Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal

Contributing scenario controlling worker exposure for 2: General exposures (closed systems)

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 3: General exposures (open systems)

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Film formation - air drying

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 5: Film formation - force drying (50 - 100°C). Stoving (>100°C). UV/EB radiation curing

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Mixing operations

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 7: Preparation of material for application

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 8: Spraying (automatic/robotic)

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Carry out in a vented booth provided with laminar airflow.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 9: Production of preparation or articles by tableting, compression, extrusion or pelletisation

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide enhanced general ventilation by mechanical means.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 10: Transfer from/pouring from containers

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation

Respiratory protection : Wear a respirator conforming to EN140 with type A/P2 filter or better.

Contributing scenario controlling worker exposure for 11: Drum/batch transfers

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Ensure material transfers are under containment or extract ventilation.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 12: Laboratory activities

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 13: Dipping, immersion and pouring

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide extract ventilation to points where emissions occur.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 14: Roller, spreader, flow application

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 15: Material transfers

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Conditions and measures related to personal protection, hygiene and health evaluation
Contributing scenario controlling worker exposure for 16: Spraying

Physical state : Pasty

Dust : Solid, low dustiness

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours

Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Engineering controls : Provide enhanced general ventilation by mechanical means.

Conditions and measures related to personal protection, hygiene and health evaluation

Respiratory protection : Wear a respirator conforming to EN140 with type A/P2 filter or better.

Section 3 - Exposure estimation and reference to its source

Website:	: Not applicable.
Exposure estimation and reference to its source - Environment: 1:	
Exposure assessment (environment):	: Hydrocarbon Block Method (Petrorisk)
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: General exposures (closed systems)	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: General exposures (open systems)	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 4: Film formation - air drying	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 5: Film formation - force drying (50 - 100°C). Stoving (>100°C). UV/EB radiation curing	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 6: Mixing operations	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 7: Preparation of material for application	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 8: Spraying (automatic/robotic)	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 9: Production of preparation or articles by tableting, compression, extrusion or pelletisation	
Exposure assessment (human):	: ECETOC TRA consumer v3
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Workers: 10: Transfer from/pouring from containers

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 11: Drum/batch transfers

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 12: Laboratory activities

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 13: Dipping, immersion and pouring

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 14: Roller, spreader, flow application

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 15: Material transfers

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 16: Spraying

Exposure assessment (human): : ECETOC TRA consumer v3

Exposure estimation and reference to its source : Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.
Health	: Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Additional good practice advice beyond the REACH CSA

Environment : Not available.

Health : Not available.

EU APNL Non DG

EU APNL ES Coatings

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Product name : EU APNL Non DG

Section 1 - Title

Short title of the exposure scenario : EU APNL ES Laboratories
List of use descriptors : **Identified use name:** Use in laboratories
Process Category: PROC10, PROC15
Substance supplied to that use in form of: In a mixture
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02, ERC04

Environmental contributing scenarios :

Health Contributing scenarios : **Cleaning**
Laboratory activities

Processes and activities covered by the exposure scenario : Use of the substance within laboratory settings, including material transfers and equipment cleaning.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

Frequency and duration of use : Continuous release Emission days300
Other conditions affecting environmental exposure : Release fraction to air from process (initial release prior to RMM)0.5 Release fraction to wastewater from process (initial release prior to RMM)0.5 Release fraction to soil from process (initial release prior to RMM)0
Technical conditions and measures at process level (source) to prevent release : Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil : Risk from environmental exposure is driven by freshwater. No wastewater treatment required. Treat air emission to provide a typical removal efficiency of0 Treat on-site wastewater (prior to receiving water discharge) to provide the required removal efficiency of0 If discharging to municipal sewage treatment plant, provide the required on-site wastewater removal efficiency of0

Contributing scenario controlling worker exposure for 2: Cleaning

Physical state : Pasty
Dust : Solid, low dustiness
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours
Area of use: : Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls : Ensure material transfers are under containment or extract ventilation.
Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 3: Laboratory activities

Physical state	: Pasty
Dust	: Solid, low dustiness
Frequency and duration of use/exposure	: Covers daily exposures up to 8 hours
Area of use:	: Assumes use at not more than 20°C above ambient temperature, unless stated differently.
Engineering controls	: No specific measures identified.
Conditions and measures related to personal protection, hygiene and health evaluation	

Section 3 - Exposure estimation and reference to its source

Website: : Not applicable.

Exposure estimation and reference to its source - Environment: 1:

Exposure assessment (environment):	: Hydrocarbon Block Method (Petrisk)
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Workers: 2: Cleaning

Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

Exposure estimation and reference to its source - Workers: 3: Laboratory activities

Exposure assessment (human):	: The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.
Health	: Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

