SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: BENFERJOLLY Comp.A

Other means of identification:

Not relevant

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

Relevant uses (Professional users): Adhesive for construction

IDENTIFIED USES: Professional (SU22)

Uses advised against: All uses not specified in this section or in section 7.3

Please see the annex for detailed information about the specific and safe usage of the product.

1.3 Details of the supplier of the safety data sheet:

LATICRETE EUROPE S.r.l. a socio unico
Via Paletti snc
41051 Castelnuovo Rangone - Italia
Phone: +39 059 535 540 - Fax: +39 059 538 338
sds@laticreteeurope.com
https://eu.laticrete.com

1.4 Emergency telephone number: NHS Direct (UK): +44 0845 46 47
Europe's emergency number: 112
Company number (08:00 - 18:00 CET): (+39) 059 535540

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Irrit. 2: Eye irritation, Category 2, H319
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning

Hazard statements:

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261: Avoid breathing vapours
P264: Wash thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH205: Contains epoxy constituents. May produce an allergic reaction.
Contains Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol.

Substances that contribute to the classification

[[(2-ethylhexyl)oxy]methyl]oxirane; Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

2.3 Other hazards:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 2: HAZARDS IDENTIFICATION ** (continued)

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

*** Changes with regards to the previous version*

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture composed of additives, pigments and resins

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 1675-54-3 EC: 216-823-5 Index: 603-073-00-2 REACH: 01-2119456619-26-XXXX	**Bis-[4-(2,3-epoxipropoxi)phenyl]propane**(1)	Self-classified	5 - <10%
	Regulation 1272/2008	Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 2461-15-6 EC: 219-553-6 Index: Not relevant REACH: 01-2119962196-31-XXXX	**[[(2-ethylhexyl)oxy]methyl]oxirane**(1)	Self-classified	1 - <2%
	Regulation 1272/2008	Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Warning	
CAS: Not relevant EC: 700-960-7 Index: Not relevant REACH: Not relevant	**Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol**(1)	Self-classified	1 - <2%
	Regulation 1272/2008	Aquatic Chronic 3: H412; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 8007-24-7 EC: 700-991-6 Index: Not relevant REACH: 01-2119502450-57-XXXX	**Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled**(1)	Self-classified	0.1 - <1%
	Regulation 1272/2008	Acute Tox. 4: H302+H312; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Danger	

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	% (w/w) >=5: Skin Irrit. 2 - H315 % (w/w) >=5: Eye Irrit. 2 - H319

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled CAS: 8007-24-7 EC: 700-991-6	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1100 mg/kg	
	LC50 inhalation vapour	Not relevant	

*** Changes with regards to the previous version*

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

- CONTINUED ON NEXT PAGE -

SECTION 4: FIRST AID MEASURES (continued)

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Please see the annex for detailed information about handling, storage and specific end uses.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1675-54-3	Dermal	Not relevant	Not relevant	0,75 mg/kg	Not relevant
EC: 216-823-5	Inhalation	Not relevant	Not relevant	4,93 mg/m³	Not relevant
[[(2-ethylhexyl)oxy]methyl]oxirane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 2461-15-6	Dermal	1 mg/kg	Not relevant	4,17 mg/kg	Not relevant
EC: 219-553-6	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 8007-24-7	Dermal	Not relevant	Not relevant	2,1 mg/kg	Not relevant
EC: 700-991-6	Inhalation	Not relevant	Not relevant	7,4 mg/m³	Not relevant

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	Oral	Not relevant	Not relevant	0,5 mg/kg	Not relevant
CAS: 1675-54-3	Dermal	Not relevant	Not relevant	0,0893 mg/kg	Not relevant
EC: 216-823-5	Inhalation	Not relevant	Not relevant	0,87 mg/m³	Not relevant
[[(2-ethylhexyl)oxy]methyl]oxirane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 2461-15-6	Dermal	0,5 mg/kg	Not relevant	2,5 mg/kg	Not relevant
EC: 219-553-6	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	Oral	Not relevant	Not relevant	0,75 mg/kg	Not relevant
CAS: 8007-24-7	Dermal	Not relevant	Not relevant	0,75 mg/kg	Not relevant
EC: 700-991-6	Inhalation	Not relevant	Not relevant	1,31 mg/m³	Not relevant

PNEC:

Identification				
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	STP	10 mg/L	Fresh water	0,006 mg/L
CAS: 1675-54-3	Soil	0,065 mg/kg	Marine water	0,001 mg/L
EC: 216-823-5	Intermittent	0,018 mg/L	Sediment (Fresh water)	0,341 mg/kg
	Oral	0,011 g/kg	Sediment (Marine water)	0,034 mg/kg
[[(2-ethylhexyl)oxy]methyl]oxirane	STP	10 mg/L	Fresh water	0,007 mg/L
CAS: 2461-15-6	Soil	57,16 mg/kg	Marine water	0,001 mg/L
EC: 219-553-6	Intermittent	0,072 mg/L	Sediment (Fresh water)	286,66 mg/kg
	Oral	Not relevant	Sediment (Marine water)	28,66 mg/kg
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	STP	100 mg/L	Fresh water	0,0114 mg/L
CAS: 8007-24-7	Soil	171,41 mg/kg	Marine water	0,00114 mg/L
EC: 700-991-6	Intermittent	Not relevant	Sediment (Fresh water)	5 mg/kg
	Oral	0,0333 g/kg	Sediment (Marine water)	0,5 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A)	CE CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	CE CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2022	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 ºC:	0 kg/m³ (0 g/L)
Average carbon number:	Not relevant
Average molecular weight:	Not relevant

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Paste
Colour:	White
Odour:	Sweet
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	233 - 320 ºC
Vapour pressure at 20 ºC:	9 Pa
Vapour pressure at 50 ºC:	91,28 Pa (0,09 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	1800 - 2000 kg/m³
Relative density at 20 ºC:	1,9
Dynamic viscosity at 20 ºC:	500000 - 600000 mPa·s
Kinematic viscosity at 20 ºC:	250000 - 350000 mm²/s
Kinematic viscosity at 40 ºC:	>20,5 mm²/s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Solubility properties:	Insoluble in water
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	Not relevant *
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Not applicable	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

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

The experimental information related to the toxicological properties of the product itself is not available

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Bis-[4-(2,3-epoxipropoxi)phenyl]propane (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled CAS: 8007-24-7 EC: 700-991-6	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1100 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
[(2-ethylhexyl)oxy]methyl]oxirane CAS: 2461-15-6 EC: 219-553-6	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Identification	Acute toxicity		Genus
Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol CAS: Not relevant EC: 700-960-7	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

*** Changes with regards to the previous version*

SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	LC50	2 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1675-54-3	EC50	1,7 mg/L (48 h)	Daphnia magna	Crustacean
EC: 216-823-5	EC50	9,4 mg/L (72 h)	Scenedesmus subspicatus	Algae
[[(2-ethylhexyl)oxy]methyl]oxirane	LC50	5000 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 2461-15-6	EC50	Not relevant		
EC: 219-553-6	EC50	Not relevant		
Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: Not relevant	EC50	>10 - 100 mg/L (48 h)		Crustacean
EC: 700-960-7	EC50	>10 - 100 mg/L (72 h)		Algae
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: 8007-24-7	EC50	>10 - 100 mg/L (48 h)		Crustacean
EC: 700-991-6	EC50	>10 - 100 mg/L (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	NOEC	Not relevant		
CAS: 1675-54-3 EC: 216-823-5	NOEC	0,3 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	BOD5	Not relevant	Concentration	Not relevant
CAS: 1675-54-3	COD	Not relevant	Period	28 days
EC: 216-823-5	BOD5/COD	Not relevant	% Biodegradable	5 %
[[(2-ethylhexyl)oxy]methyl]oxirane	BOD5	Not relevant	Concentration	100 mg/L
CAS: 2461-15-6	COD	Not relevant	Period	28 days
EC: 219-553-6	BOD5/COD	Not relevant	% Biodegradable	0 %
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	BOD5	Not relevant	Concentration	19.2 mg/L
CAS: 8007-24-7	COD	Not relevant	Period	28 days
EC: 700-991-6	BOD5/COD	Not relevant	% Biodegradable	96 %

12.3 Bioaccumulative potential:

Substance-specific information:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification	Bioaccumulation potential	
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	BCF	31
CAS: 1675-54-3	Pow Log	3
EC: 216-823-5	Potential	Moderate
[[(2-ethylhexyl)oxy]methyl]oxirane	BCF	355
CAS: 2461-15-6	Pow Log	
EC: 219-553-6	Potential	High
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	BCF	882
CAS: 8007-24-7	Pow Log	6.2
EC: 700-991-6	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Bis-[4-(2,3-epoxipropoxi)phenyl]propane	Koc	450	Henry	Not relevant
CAS: 1675-54-3	Conclusion	Low	Dry soil	Not relevant
EC: 216-823-5	Surface tension	Not relevant	Moist soil	Not relevant
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled	Koc	122.51	Henry	0E+0 Pa·m³/mol
CAS: 8007-24-7	Conclusion	Moderate	Dry soil	Not relevant
EC: 700-991-6	Surface tension	Not relevant	Moist soil	Not relevant

Insoluble in water

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

*** Changes with regards to the previous version*

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

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SECTION 15: REGULATORY INFORMATION (continued)

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Not relevant

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ….):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The provider has carried out a chemical safety assessment

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
· New declared substances
[[(2-ethylhexyl)oxy]methyl]oxirane (2461-15-6)
· Removed substances
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (68609-97-2)
Substances that contribute to the classification (SECTION 2):
· New declared substances
[[(2-ethylhexyl)oxy]methyl]oxirane (2461-15-6)
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
· Supplementary information

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.
H412: Harmful to aquatic life with long lasting effects.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Classification procedure:

Skin Irrit. 2: Calculation method
Aquatic Chronic 3: Calculation method
Skin Sens. 1A: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

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ANNEX: SAFE USE

INFORMATION FOR SAFE USE

The relevant exhibition scenarios relating to the substances that make up the mixture are reported in this document.

End-use sector: PROFESSIONAL

Process category:

PROC10: application with rollers or brushes.
PROC19: manual mixing in direct contact, with the sole use of personal protective equipment.

Cashew shell oil

1 - Abbreviated title of the exhibition scenario: Professional application of epoxy resins and hardeners

List of usage descriptors:

Substance supplied for such use in the form of: mixture
End-use sector: professional – SU22

Environmental release category:

ERC08c: extensive internal dispersive use resulting in inclusion in a matrix or application to an ERC08f matrix: extensive external dispersive use resulting in inclusion in an array or application to a matrix

Process categories:

PROC10: application with rollers or brushes.
PROC19: manual mixing in direct contact, with the sole use of personal protective equipment.

2 - Exposure controls, estimation of environmental exposure and reference to its source

Contributory scenario controlling environmental exposure for ERC8c

Product features	The starting materials epoxy resins and hardeners contain < 1% cnsl free.
Frequency and duration of use:	365 days/year
Quantities used	Used annual tonnage of free CNSL = up to 50 tonnes Daily quantity of free CNSL used= up to 167 kg/day
Other operating conditions that Affect environmental exposure	Fraction of tonnage released into the air by the process: 0 Fraction of tonnage released into wastewater from the process: 0.001 Fraction of tonnage released into surface water from the process: 0 Fraction of tonnage released into industrial soil by the process: 0.005 Fraction of tonnage released into agricultural land : 0 Fraction of the main local source: 0.002
On-site technical conditions and measures to reduce or limit discharges, emissions into the air and emissions to the soil:	Store in closed systems Collect all waste residues and wastewater in a sealed system for recycling and reuse or disposal by an authorized operator. Ensure general or controlled ventilation (5 to 15 air changes per hour).
Organizational measures to prevent or limit release from the site	All waste awaiting collection by the authorised disposal contractor shall be stored in a sealed closed system. The should have an environmental and waste containment plan to prevent release into the aquatic environment.
Conditions and measures relating to the municipal wastewater treatment plant	The controlled release of any wastewater potentially containing free CNSL to a municipal wastewater purification was considered both for local fresh water and for marine assessment (for example, wastewater does not exclu waste purification system Size of the municipal wastewater treatment plant: 2000 m^3/day Receiving water flow: 18000 m^3/day Dilution factor (fresh water) = 10

- CONTINUED ON NEXT PAGE -

ANNEX: SAFE USE (continued)

	Dilution factor (marine waters)= 100 Fraction of degraded emissions in the wastewater treatment plant = 93.2% No on-site wastewater treatment was considered which is expected to reduce the concentration of free CNSL municipal wastewater treatment plant and reduce the expected environmental concentration in the water.
Conditions and measures relating to the external treatment of waste for disposal	All waste is to be treated as contaminated chemical waste. Disposal by incineration.
Other measures	Comply with local regulations.
Estimation of environmental exposure	If the risk management measures and recommended operating conditions are complied with, exposures are expected to exceed the expected concentrations without effect and therefore the risk characterisation ratios will be than 1.
Evaluation method	To obtain estimates reflecting the conditions of use of the Cashew Nut Shell Liquid (CNSL), the default release valu Tables A- & B (EC 20031) and the descriptions of the ERC in the ECHA Guidelines on Chemical Safety Elevation Assessment Requirements, Chapter R.16: Estimation of Environmental Exposure, were considered. IN this case exposure estimation was made considering predefined assumptions implemented in the EU2S V2.12 exhibition mod

Contributory scenario controlling environmental exposure for ERC8f

Product features	The starting materials epoxy resins and hardeners contain < 1% cnsl free.
Frequency and duration of use:	365 days/year
Quantities used	Used annual tonnage of free CNSL = up to 50 tonnes Daily quantity of free CNSL used= up to 167 kg/day
Other operating conditions that Affect environmental exposure	Fraction of tonnage released into the air by the process: 0 Fraction of tonnage released into wastewater from the process: 0.001 Fraction of tonnage released into surface water from the process: 0 Fraction of tonnage released into industrial soil by the process: 0.005 Fraction of tonnage released into agricultural land : 0 Fraction of the main local source: 0.002
On-site technical conditions and measures to reduce or limit discharges, emissions into the air and emissions to the soil:	Store in closed systems Collect all waste residues and wastewater in a sealed system for recycling and reuse or disp by an authorized operator. Ensure general or controlled ventilation (5 to 15 air changes per hour).
Organizational measures to prevent or limit release from the site	All waste awaiting collection by the authorised disposal contractor shall be stored in a sealed closed system. The should have an environmental and waste containment plan to prevent release into the aquatic environment.
Conditions and measures relating to the municipal wastewater treatment plant	The controlled release of any wastewater potentially containing free CNSL to a municipal wastewater purification was considered both for local fresh water and for marine assessment (for example, wastewater does not exclude a w purification system Size of the municipal wastewater treatment plant: 2000 m^3/day Receiving water flow: 18000 m^3/day Dilution factor (fresh water) = 10 Dilution factor (marine waters)= 100 Fraction of degraded emissions in the wastewater treatment plant = 93.2% No on-site wastewater treatment was considered which is expected to reduce the concentration of free CNSL municipal wastewater treatment plant and reduce the expected environmental concentration in the water.
Conditions and measures relating to the external treatment of waste for disposal	All waste is to be treated as contaminated chemical waste. Disposal by incineration.
Other measures	Comply with local regulations.
Estimation of environmental exposure	If the risk management measures and recommended operating conditions are complied with, exposures are not expe to exceed the expected concentrations without effect and therefore the risk characterisation ratios will be less than 1.
Evaluation method	To obtain estimates reflecting the conditions of use of the Cashew Nut Shell Liquid (CNSL), the default release valu Tables A- & B (EC 20031) and the descriptions of the ERC in the ECHA Guidelines on Chemical Safety Elevation Assessment Requirements, Chapter R.16: Estimation of Environmental Exposure, were considered. IN this case exposure estimation was made considering predefined assumptions implemented in the EU2S V2.12 exhibition mode

Contributory scenario that controls worker exposure for PROC10

Covered usage descriptors	Application with rollers or brushes

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ANNEX: SAFE USE (continued)

Area of use	Professional (SU22)
Operating conditions	
Concentration of the substance	The resins contain < 1 % of free CNSL.
Physical form of the substance	Liquid
Quantities used:	up to 50 tons of free CNSL per year
Operating temperature	Up to 70°C
Duration and frequency application	8 hours a day, 5 days/week
Human factors not affected by risk management	Not applicable.
Other operating conditions that affect the exposure of insiders	indoor use
Technical conditions and precautions	Indoor: Exhaust air ventilation system (LEV) in processing zones. Delimit the area where possible. Avoid contact w treat surfaces. Wear hand protection (EN374 standard as a minimum), eye protection (EN166 standard as a minimu Wear the air mask respirator as a minimum EN140. Wear protective clothing (EN368 standard at least in combinat with adequate training for the management of personal protective equipment. Duration > 4 hours.
Organizational measures to avoid/limit spillage, dispersion and exposure	Adopt an adequate standard of cleanliness at work.
Management measures for Risks	Immediately clean the spills. Store wastewater and discharges in a sealed system for later disposal by an authorised operator or recycling/reuse. Wear hand protection (EN374 standard as a minimum), eye protection (EN166 standard a minimum). Typical duration 15 – 60 minutes.
Estimation of exposure and reference to its source	On the basis of known operating conditions and taking into account risk management measures, the expec exposures are not assumed to exceed the expected no-effect derived limits and that the resulting risk characterisat levels are less than 1. Additional risk management measures may be taken for good industrial hygiene.

Valuation method Estimates for worker exposures for activities associated with cnSL use were evaluated with ECETOC TRAv2.

Contributory scenario controlling worker exposure for PROC19

Covered usage descriptors	manual mixing in direct contact, with the sole use of personal protective equipment.
Area of use	Professional (SU22)
Operating conditions	
Concentration of the substance	The resins contain < 1 % of free CNSL.
Physical form of the substance	Liquid
Quantities used:	up to 50 tons of free CNSL per year
Operating temperature	Up to 70°C
Duration and frequency application	8 hours a day, 5 days/week
Human factors not affected by risk management	Not applicable.
Other operating conditions that affect the exposure of insiders	indoor use
Technical conditions and Precautions	Indoor: Unload and disconnect the mixing system before turning off the equipment or maintenance. Clean each spill immediately. Keep wastewater and discharges in a sealed system for later disposal by authorized operator
Organizational measures to avoid/limit spillage, dispersion and exposure	Adopt an adequate standard of cleanliness at work.

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ANNEX: SAFE USE (continued)

Management measures for Risks	Bone protection for hands (EN374 standard as a minimum), eye protection (EN166 minimum standard). Wear protect clothing (EN368 standard at least in combination with adequate training for the management of personal protective equipment. Duration 15-60 min.
Estimation of exposure and reference to its source	On the basis of known operating conditions and taking into account risk management measures, the expec exposures are not assumed to exceed the expected no-effect derived limits and that the resulting risk characterisat levels are less than 1. Additional risk management measures may be taken for good industrial hygiene.
Evaluation method	Estimates for worker exposures for activities associated with CNSL use were evaluated with ECETOC TRAv2.

3 - Downstream User Guide (DU) to assess whether it operates within the limits set by the ES

Health and environment No information.

Phenol methylstyrenate

1 - Abbreviated title of the exhibition scenario: Professional application of epoxy resins and hardeners

List of usage descriptors:

Substance supplied for such use in the form of: mixture
End-use sector: professional – SU22

Environmental release category:

ERC08c: extensive internal dispersive use resulting in inclusion in a matrix or application to an ERC08f matrix: extensive external dispersive use resulting in inclusion in an array or application to a matrix

Process categories:

PROC10: application with rollers or brushes.
PROC19: Manual mixing with direct contact, with the sole use of personal protective equipment

2 - Exposure controls, estimation of environmental exposure and reference to its source

Contributory scenario controlling environmental exposure for ERC8c

Product features	The substance is a UVCB complex, not biodegradable.
Frequency and duration of use:	365 days/year, continuous release
Quantities used	Used EU tonnage 3.00E+2 Fraction of EU tonnage used in the 1.00E-1 region Tonnage of use per region (t/year) 3.00E+01 Locally used regional tonnage fraction 2.00E-3 Maximum daily site tonnage (kg/day) 1.64E-1 Annual site tonnage (t/year) 6.00E-2 Daily quantity of free CNSL used= up to 167 kg/day
Unaffected environmental factors	Local freshwater dilution factor 1.00E+1 Local seawater dilution factor 1.00E+2
from risk management	Recipient surface water flow (m3/d) 18000
Other operating	Indoor use.

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ANNEX: SAFE USE (continued)

conditions that affect environmental exposure	Fraction leveled in air by the process (before MMRs) 0 Fraction released in wastewater by the process (before MMRs) 1.00 Fraction released into the soil by the process (before MMRs) 1.00E-4	
Organizational measures to prevent or limit release from the site	Do not distribute the sludge generated by industrial water treatment on natural soils.	
Conditions and measures relating to the municipal water purification plant of unloading	Total effectiveness of wastewater removal after on-site and offsite RMM (urban type treatment plant) RMM (%) Estimated substance removal from wastewater with urban treatment plant 8.90E+1 Total effectiveness of removal from wastewater 8.9E+1 Maximum permissible tonnage per site (Msafe) based on release after urban wastewater treatment (kg/d) 4.36E+1 Capacity assumed urban wastewater treatment plant (m3/d) 0	
Conditions and measures relating to the external treatment of waste for disposal	The external treatment and disposal of waste must comply with local and/or national regulations.	
Estimation of environmental exposure	Regional PEC in surface water (total) mg/l	1.48E-4
	RcR regional part aquatic / fresh water	8.25E-3
	Regional PEC in seawater (total) mg/l	2.05E-5
	RCR regional part aquatic / sea water	1.31E-2
	Regional PEC in soil mg/kg dwt	2.72E-2
	Regional RCR in land	2.09E-1
	PEC regioanle in freshwater sediments (total) mg/kg dwt	3.66E+0
	Regional RCR in freshwater sediments	6.92E-2
	Regional PEC in seawater sediments (total) mg/kg dwt	5.78E-1
	Regional RCR in seawater sediments	1.09E-1
	PEC for microorganisms in STP	1.96E-4
	RCR wastewater treatment plant	8.17E-5
Method of evaluation	ECETOC TRA v2 in advanced mode with ERC APPROACH.	

Contributory scenario controlling environmental exposure for ERC8f

Product features	The substance is a UVCB complex, not biodegradable.
Frequency and duration of use:	365 days/year, continuous release
Quantities used	Used EU tonnage 3.00E+2 Fraction of EU tonnage used in the 1.00E-1 region Tonnage of use per region (t/year) 3.00E+01 Locally used regional tonnage fraction 2.00E-3 Maximum daily tonnage of the site (kg/day) 1.64E-1 Annual site tonnage (t/year) 6.00E-2 Daily quantity of free CNSL used= up to 167 kg/day
Environmental	Local dilution factor in fresh water

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ANNEX: SAFE USE (continued)

factors not affected by risk management	1.00E+1 Local dilution factor in seawater 1.00E+2 Recipient surface water flow (m3/d) 18000
Other operating conditions that affect environmental exposure	Indoor use. Fraction leveled in air by the process (before MMRs) 0 Fraction released in wastewater by the process (before MMRs) 1.00 Fraction released into the soil by the process (before MMRs) 1.00E-4
Organizational measures to prevent or limit release from the site	Do not distribute the sludge generated by industrial water treatment on natural soils.
Conditions and measures relating to the municipal water purification plant of unloading	Total effectiveness of wastewater removal after on-site and offsite RMM (urban type treatment plant) RMM (%) Estimated substance removal from wastewater with urban treatment plant 8.90E+1 Total effectiveness of removal from wastewater 8.9E+1 Maximum permissible tonnage per site (Msafe) based on release after urban wastewater treatment (kg/d) 4.36E+1 Capacity assumed urban wastewater treatment plant (m3/d) 0
Conditions and measures relating to the external treatment of waste for disposal	The external treatment and disposal of waste must comply with local and/or national regulations.
Estimation of environmental exposure	Regional PEC in surface water (total) mg/l 1.48E-4 8.25E-3 RcR regional part aquatic / fresh water 2.05E-5 Regional PEC in seawater (total) mg/l RCR regional part aquatic / sea water 1.31E-2 Regional PEC in soil mg/kg dwt 2.72E-2 Regional RCR in land 2.09E-1 Regional PEC in freshwater sediments (total) mg/kg dwt 3.66E+0 Regional RCR in freshwater sediments 6.92E-2 Regional PEC in seawater sediments (total) mg/kg dwt 5.78E-1 Regional RCR in seawater sediments 1.09E-1 PEC for microorganisms in STP 1.96E-4 RCR wastewater treatment plant 8.17E-5
Evaluation method	ECETOC TRA v2 in advanced mode with ERC APPROACH.

Contributory scenario that controls worker exposure for PROC10

Covered usage descriptors	Application with rollers or brushes
Area of use	Professional (SU22)
Operating conditions	
Concentration of the substance	Up to 50%
Physical form of the substance	Liquid
Quantities used:	without relevance in Advanced Reach Tool (ART)
Vapour pressure	10 Pa (default ART)
Duration and frequency	8 hours a day, =<240 days/year

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ANNEX: SAFE USE (continued)

application	
Human factors not affected by risk management	Not applicable.
Other operating conditions that affect the exposure of insiders	Outdoor
Technical conditions and measures relating to personal protection, hygiene and health assessment.	Wear appropriate gloves (EN374 tested) and eye protection, special training.
Organizational measures to avoid/limit spillage, dispersion and exposure	Avoid frequent and direct contact with the substance. Minimize manual steps. Regular cleaning of equipment a working area. On-site monitoring to verify that the RMM adopted are used correctly and that the CBs are respected.
Estimation of exposure and reference to its source	Long-term exposure – inhalation: 0.72 mg/m3 // RCR 0 .01 Long-term exposure – cutaneous: 1.37 mg/kg/day // RCR 0.08 Combined RCR 0.10
Evaluation method	Advanced Reach Tool (ART)

Contributory scenario controlling worker exposure for PROC19

Covered usage descriptors	Manual mixing with direct contact, with the sole use of personal protective equipment
Area of use	Professional (SU22)
Operating conditions	
Concentration of the substance	Up to 50%
Physical form of the substance	Liquid
Quantities used:	without relevance in Advanced Reach Tool (ART)
Vapour pressure	10 Pa (default ART)
Duration and frequency application	8 hours a day, =<240 days/year
Human factors not affected by risk management	Not applicable.
Other operating conditions that affect the exposure of professionals	Outdoor
Technical conditions and measures relating to personal protection, hygiene and health assessment.	Wear appropriate gloves (EN374 tested) and eye protection, special training.
Organizational measures to avoid/limit spillage, dispersion and exposure	Avoid frequent and direct contact with the substance. Minimize manual steps. Regular cleaning of equipment a working area. On-site monitoring to verify that the RMM adopted are used correctly and that the CBs are respected.
Estimation of exposure and reference to its source	Long-term exposure – inhalation: 7.2E-3 mg/m3 // RCR 0 .00 Long-term exposure – cutaneous: 7.07 mg/kg/day // RCR 0.43 Combined RCR 0.43
Evaluation method	Advanced Reach Tool (ART)

3 - Downstream User Guide (DU) to assess whether it operates within the limits set by the ES

Bless you	Projected exposures are not expected to exceed the DNELs if the risk management measures/oper conditions described are implemented. Where different management measures are taken risks/operating conditions users are required to ensure that risks are managed at at least an equiv level.

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ANNEX: SAFE USE (continued)

Environment	The required efficiency of wastewater removal can be achieved using onsite/offsite technologies individ or in combination.

- END OF SAFETY DATA SHEET -

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: BENFERJOLLY Comp.B

Other means of identification:

Not relevant

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

Relevant uses (Professional users): Hardener for adhesives

IDENTIFIED USES: Professional (SU22)

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

LATICRETE EUROPE S.r.l. a socio unico
Via Paletti snc
41051 Castelnuovo Rangone - Italia
Phone: +39 059 535 540 - Fax: +39 059 538 338
sds@laticreteeurope.com
https://eu.laticrete.com

1.4 Emergency telephone number: NHS Direct (UK): +44 0845 46 47
Europe's emergency number: 112
Company number (08:00 - 18:00 CET): (+39) 059 535540

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a poison center/doctor.

Supplementary information:

Contains Acidi grassi, C18-insaturi, dimeri, prodotti di reazione oligomerici con acidi grassi da tallolio e trietilenetetramina.

Substances that contribute to the classification

Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction; 3-aminomethyl-3,5,5-trimethylcyclohexylamine

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Solution composed of amines

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: Not relevant EC: 701-046-0 Index: Not relevant REACH: 01-2119972321-42-XXXX	**Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentam**	Self-classified	**17 - <22%**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Danger	
CAS: 68082-29-1 EC: 500-191-5 Index: Not relevant REACH: Not relevant	**Acidi grassi, C18-insaturi, dimeri, prodotti di reazione oligomerici con acidi grassi da tallolio e trietilenetetramina(1)**	Self-classified	**10 - <20%**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 90-72-2 EC: 202-013-9 Index: 603-069-00-0 REACH: 01-2119560597-27-XXXX	**2,4,6-tris(dimethylaminomethyl)phenol(1)**	ATP CLP00	**<5%**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	
CAS: 2855-13-2 EC: 220-666-8 Index: 612-067-00-9 REACH: 01-2119514687-32-XXXX	**3-aminomethyl-3,5,5-trimethylcyclohexylamine(1)**	ATP ATP17	**<3%**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317 - Danger	

(1) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	% (w/w) >=0,001: Skin Sens. 1A - H317

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
2,4,6-tris(dimethylaminomethyl)phenol CAS: 90-72-2 EC: 202-013-9	LD50 oral	1200 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	Not relevant	
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LD50 oral	1030 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	Not relevant	

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

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SECTION 4: FIRST AID MEASURES (continued)

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

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SECTION 7: HANDLING AND STORAGE (continued)

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: Not relevant	Dermal	Not relevant	Not relevant	1,1 mg/kg	Not relevant
EC: 701-046-0	Inhalation	Not relevant	Not relevant	3,9 mg/m³	Not relevant
2,4,6-tris(dimethylaminomethyl)phenol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 90-72-2	Dermal	Not relevant	Not relevant	0,15 mg/kg	Not relevant
EC: 202-013-9	Inhalation	Not relevant	Not relevant	0,53 mg/m³	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 2855-13-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 220-666-8	Inhalation	Not relevant	Not relevant	Not relevant	0,073 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	Oral	Not relevant	Not relevant	0,56 mg/kg	Not relevant
CAS: Not relevant	Dermal	Not relevant	Not relevant	0,56 mg/kg	Not relevant
EC: 701-046-0	Inhalation	Not relevant	Not relevant	0,97 mg/m³	Not relevant
2,4,6-tris(dimethylaminomethyl)phenol	Oral	Not relevant	Not relevant	0,075 mg/kg	Not relevant
CAS: 90-72-2	Dermal	Not relevant	Not relevant	0,075 mg/kg	Not relevant
EC: 202-013-9	Inhalation	Not relevant	Not relevant	0,13 mg/m³	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Oral	Not relevant	Not relevant	0,526 mg/kg	Not relevant
CAS: 2855-13-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 220-666-8	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant

PNEC:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly -tetraethylenepentamine fraction	STP	7,21 mg/L	Fresh water	0,003 mg/L
CAS: Not relevant	Soil	52,58 mg/kg	Marine water	0 mg/L
EC: 701-046-0	Intermittent	0,026 mg/L	Sediment (Fresh water)	263,01 mg/kg
	Oral	Not relevant	Sediment (Marine water)	26,301 mg/kg
2,4,6-tris(dimethylaminomethyl)phenol	STP	0,2 mg/L	Fresh water	0,046 mg/L
CAS: 90-72-2	Soil	0,025 mg/kg	Marine water	0,005 mg/L
EC: 202-013-9	Intermittent	0,46 mg/L	Sediment (Fresh water)	0,262 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,026 mg/kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine	STP	3,18 mg/L	Fresh water	0,06 mg/L
CAS: 2855-13-2	Soil	1,121 mg/kg	Marine water	0,006 mg/L
EC: 220-666-8	Intermittent	0,23 mg/L	Sediment (Fresh water)	5,784 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,578 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: K)	CE CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.35 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2022	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 ºC:	0 kg/m³ (0 g/L)
Average carbon number:	Not relevant
Average molecular weight:	Not relevant

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Paste
Colour:	Brown
Odour:	Aminic
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	>180 ºC
Vapour pressure at 20 ºC:	4,934E-1 Pa
Vapour pressure at 50 ºC:	11,36 Pa (0,01 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	1000 - 1500 kg/m³
Relative density at 20 ºC:	1 - 1,5
Dynamic viscosity at 20 ºC:	4000 - 6000 mPa·s
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	>20,5 mm²/s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	>110 ºC (ASTM D-93)
Flammability (solid, gas):	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Autoignition temperature:	380 ºC
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Not relevant
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Product-specific toxicological information:

Acute toxicity		Genus
LD50 oral	>2000 mg/kg	

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction CAS: Not relevant EC: 701-046-0	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
2,4,6-tris(dimethylaminomethyl)phenol CAS: 90-72-2 EC: 202-013-9	LD50 oral	1200 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LD50 oral	1030 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Acidi grassi, C18-insaturi, dimeri, prodotti di reazione oligomerici con acidi grassi da tallolio e trietilenetetramina CAS: 68082-29-1 EC: 500-191-5	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	LC50	7,1 mg/L (96 h)	Danio rerio	Fish
CAS: Not relevant	EC50	5,2 mg/L (48 h)	Daphnia magna	Crustacean
EC: 701-046-0	EC50	2,6 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
2,4,6-tris(dimethylaminomethyl)phenol	LC50	345 mg/L (96 h)	QSAR	Fish
CAS: 90-72-2	EC50	Not relevant		
EC: 202-013-9	EC50	Not relevant		
3-aminomethyl-3,5,5-trimethylcyclohexylamine	LC50	110 mg/L (96 h)	Leuciscus idus	Fish
CAS: 2855-13-2	EC50	388 mg/L (48 h)	N/A	Crustacean
EC: 220-666-8	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
3-aminomethyl-3,5,5-trimethylcyclohexylamine	NOEC	Not relevant		
CAS: 2855-13-2 EC: 220-666-8	NOEC	3 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	BOD5	Not relevant	Concentration	7 mg/L
CAS: 2855-13-2	COD	Not relevant	Period	28 days
EC: 220-666-8	BOD5/COD	Not relevant	% Biodegradable	8 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
2,4,6-tris(dimethylaminomethyl)phenol	BCF	3
CAS: 90-72-2	Pow Log	0.77
EC: 202-013-9	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2,4,6-tris(dimethylaminomethyl)phenol	Koc	15130	Henry	9,312E-12 Pa·m³/mol
CAS: 90-72-2	Conclusion	Immobile	Dry soil	Not relevant
EC: 202-013-9	Surface tension	Not relevant	Moist soil	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Koc	928	Henry	4,46E-4 Pa·m³/mol
CAS: 2855-13-2	Conclusion	Low	Dry soil	Not relevant
EC: 220-666-8	Surface tension	Not relevant	Moist soil	Not relevant

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Not relevant

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ….):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Not relevant

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.
H318: Causes serious eye damage.
H412: Harmful to aquatic life with long lasting effects.
H317: May cause an allergic skin reaction.

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SECTION 16: OTHER INFORMATION (continued)

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

Classification procedure:

Skin Irrit. 2: Calculation method
Eye Dam. 1: Calculation method
Aquatic Chronic 3: Calculation method
Skin Sens. 1A: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -