

## IMPLAREST EP (Comp A)



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

- 1.1 Product identifier:** IMPLAREST EP (Comp A)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- Relevant uses: Miscellaneous. For professional users/industrial user only.  
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:**  
GRUPO PUMA ESPAÑA S.L.  
AVDA. AGRUPACIÓN CÓRDOBA, NUM. 17  
14014 CÓRDOBA - CÓRDOBA - ESPAÑA  
Tfno.: +34 957 102 210 - Fax: +34 957 44 19 92  
fds@grupopuma.com  
<http://www.grupopuma.com>
- 1.4 Emergency telephone number:** +34 957 102 210 (08:30 – 13:30, 16:00 – 19:00)

### 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.

Acute Tox. 4: Acute toxicity, Category 4, H312+H332

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411

Eye Irrit. 2: Eye irritation, Category 2, H319

Skin Irrit. 2: Skin irritation, Category 2, H315

Skin Sens. 1: Sensitisation, skin, Category 1, H317

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

Warning



**Hazard statements:**

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.

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.

**Precautionary statements:**

P261: Avoid breathing vapours

P264: Wash thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.

P302+P352: IF ON SKIN: Wash with plenty of water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

**Supplementary information:**

EUH205: Contains epoxy constituents. May produce an allergic reaction.

**Substances that contribute to the classification**

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp A)

### SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

Bis-[4-(2,3-epoxipropoxi)phenyl]propane; 1,4-bis(2,3 epoxypropoxy)butane

#### 2.3 Other hazards:

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:



Non-applicable

#### 3.2 Mixture:

**Chemical description:** Epoxy resin

#### Components:

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

Identification	Chemical name/Classification	Concentration
CAS: 7727-43-7 EC: 231-784-4 Index: Non-applicable REACH: 01-2119491274-35-XXXX	<b>Barium Sulfate</b> <sup>(1)</sup> Regulation 1272/2008	Not classified <b>25 - &lt;50 %</b>
CAS: 1675-54-3 EC: 216-823-5 Index: 603-073-00-2 REACH: 01-2119456619-26-XXXX	<b>Bis-[4-(2,3-epoxipropoxi)phenyl]propane</b> <sup>(2)</sup> Regulation 1272/2008	Self-classified Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning  <b>25 - &lt;50 %</b>
CAS: 2425-79-8 EC: 219-371-7 Index: 603-072-00-7 REACH: 01-2119494060-45-XXXX	<b>1,4-bis(2,3 epoxypropoxy)butane</b> <sup>(2)</sup> Regulation 1272/2008	ATP CLP00 Acute Tox. 4: H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning  <b>2,5 - &lt;10 %</b>
CAS: 14808-60-7 EC: 238-878-4 Index: Non-applicable REACH: Non-applicable	<b>Quartz (RCS &lt; 1 %)</b> <sup>(1)</sup> Regulation 1272/2008	Not classified <b>&lt;1 %</b>

<sup>(1)</sup> Substance with a Union workplace exposure limit

<sup>(2)</sup> 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
1,4-bis(2,3 epoxypropoxy)butane CAS: 2425-79-8 EC: 219-371-7	LD50 oral	Not relevant
	LD50 dermal	1100 mg/kg (ATEi)
	LC50 inhalation	11 mg/L (ATEi)

\*\* Changes with regards to the previous version

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

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### SECTION 4: FIRST AID MEASURES (continued)

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:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

#### **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.

#### **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 (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

##### **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 spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

**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:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

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

Minimum Temp.: 5 °C  
Maximum Temp.: 30 °C  
Maximum time: 24 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):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits	
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	IOELV (8h)	0,5 mg/m <sup>3</sup>
	IOELV (STEL)	
Quartz (RCS < 1 %) CAS: 14808-60-7 EC: 238-878-4	IOELV (8h)	0,1 mg/m <sup>3</sup>
	IOELV (STEL)	

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## IMPLAREST EP (Comp A)

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Bis-[4-(2,3-epoxypropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	0,75 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	4,93 mg/m <sup>3</sup>	Not relevant
1,4-bis(2,3 epoxypropoxy)butane CAS: 2425-79-8 EC: 219-371-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	6,66 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	4,7 mg/m <sup>3</sup>	Not relevant

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	Oral	Not relevant	Not relevant	13000 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	10 mg/m <sup>3</sup>	Not relevant
Bis-[4-(2,3-epoxypropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	Oral	Not relevant	Not relevant	0,5 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0,0893 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0,87 mg/m <sup>3</sup>	Not relevant
1,4-bis(2,3 epoxypropoxy)butane CAS: 2425-79-8 EC: 219-371-7	Oral	Not relevant	Not relevant	0,33 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	3,33 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	1,16 mg/m <sup>3</sup>	Not relevant

#### PNEC:

Identification				
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	STP	62,2 mg/L	Fresh water	0,115 mg/L
	Soil	207,7 mg/kg	Marine water	Not relevant
	Intermittent	Not relevant	Sediment (Fresh water)	600,4 mg/kg
	Oral	Not relevant	Sediment (Marine water)	Not relevant
Bis-[4-(2,3-epoxypropoxy)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	STP	10 mg/L	Fresh water	0,006 mg/L
	Soil	0,065 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,018 mg/L	Sediment (Fresh water)	0,341 mg/kg
	Oral	0,011 g/kg	Sediment (Marine water)	0,034 mg/kg
1,4-bis(2,3 epoxypropoxy)butane CAS: 2425-79-8 EC: 219-371-7	STP	100 mg/L	Fresh water	0,024 mg/L
	Soil	0,003 mg/kg	Marine water	0,002 mg/L
	Intermittent	0,24 mg/L	Sediment (Fresh water)	0,084 mg/kg
	Oral	0,000028 g/kg	Sediment (Marine water)	0,008 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

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		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	NON-disposable chemical protective gloves		EN ISO 374-1:2016+A1:2018 EN 16523-1:2015+A1:2018 EN ISO 21420:2020	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

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	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 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
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

#### F.- Additional emergency measures

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:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see 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 °C:	0 kg/m <sup>3</sup> (0 g/L)
Average carbon number:	Not relevant
Average molecular weight:	Not relevant

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## IMPLAREST EP (Comp A)

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Viscous
Colour:	<input type="checkbox"/> White
Odour:	Characteristic
Odour threshold:	Not relevant *

##### Volatility:

Boiling point at atmospheric pressure:	294 °C
Vapour pressure at 20 °C:	6,118E-2 Pa
Vapour pressure at 50 °C:	1,44 Pa (0 kPa)
Evaporation rate at 20 °C:	Not relevant *

##### Product description:

Density at 20 °C:	1920 kg/m <sup>3</sup>
Relative density at 20 °C:	1,92
Dynamic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	>20,5 mm <sup>2</sup> /s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

##### Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	260 °C
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

##### Particle characteristics:

Median equivalent diameter:	Non-applicable
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#### 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:

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

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## IMPLAREST EP (Comp A)

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Surface tension at 20 °C: 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<sub>2</sub>), 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

##### 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, as it does not contain substances classified as hazardous 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 : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- 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):

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp A)

### SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)

- 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-epoxypropoxy)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
1,4-bis(2,3 epoxypropoxy)butane CAS: 2425-79-8 EC: 219-371-7	LD50 oral	3609 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (ATEi)	
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal		
	LC50 inhalation		

**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

Toxic to aquatic life with long lasting effects.

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration		Species	Genus
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	LC50	76000 mg/L (96 h)	Salmo gairdneri	Fish
	EC50	Not relevant		
	EC50	Not relevant		

*\*\* Changes with regards to the previous version*

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## IMPLAREST EP (Comp A)

### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification		Concentration	Species	Genus
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	LC50	2 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	1,7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	9,4 mg/L (72 h)	Scenedesmus subspicatus	Algae

#### Chronic toxicity:

Identification		Concentration	Species	Genus
Barium Sulfate CAS: 7727-43-7 EC: 231-784-4	NOEC	100 mg/L	Danio rerio	Fish
	NOEC	Not relevant		
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	NOEC	Not relevant		
	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 CAS: 1675-54-3 EC: 216-823-5	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	5 %

#### 12.3 Bioaccumulative potential:

##### Substance-specific information:

Identification	Bioaccumulation potential	
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	BCF	31
	Pow Log	3
	Potential	Moderate

#### 12.4 Mobility in soil:

Identification	Absorption/desorption	Volatility		
Bis-[4-(2,3-epoxipropoxi)phenyl]propane CAS: 1675-54-3 EC: 216-823-5	Koc	450	Henry	Not relevant
	Conclusion	Low	Dry soil	Not relevant
	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

\*\* 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)
	It is not possible to assign a specific code, as it depends on the intended use by the user	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:

- CONTINUED ON NEXT PAGE -

## IMPLAREST EP (Comp A)



### SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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

#### Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxi)phenyl]propane)
- 14.3 Transport hazard class(es):** 9  
Labels: 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Special regulations: 274, 335, 375, 601  
Tunnel restriction code: -  
Physico-Chemical properties: see section 9  
Limited quantities: 5 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

#### Transport of dangerous goods by sea:

With regard to IMDG 41-22:



- 14.1 UN number or ID number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxi)phenyl]propane)
- 14.3 Transport hazard class(es):** 9  
Labels: 9
- 14.4 Packing group:** III
- 14.5 Marine pollutant:** Yes
- 14.6 Special precautions for user**  
Special regulations: 335, 969, 274  
EmS Codes: F-A, S-F  
Physico-Chemical properties: see section 9  
Limited quantities: 5 L  
Segregation group: Not relevant
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

- CONTINUED ON NEXT PAGE -



## IMPLAREST EP (Comp A)

### SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number or ID number:** UN3082
- 14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxi)phenyl]propane)
- 14.3 Transport hazard class(es):** 9  
Labels: 9
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

### 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 (EC) No 1005/2009, 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:

Section	Description	Lower-tier requirements	Upper-tier requirements
E2	ENVIRONMENTAL HAZARDS	200	500

#### 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.

Laboral exposure to respirable crystalline silica must be controlled in accordance with Directive (EU) 2022/431, of the European Parliament and of the Council, of March 9, 2022, amending Directive 2004/37/EC, relating to the protection of workers against risks related to exposure to carcinogens or mutagens during work.

#### 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.:

- CONTINUED ON NEXT PAGE -



## SECTION 16: OTHER INFORMATION (continued)

### COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
  - Quartz (RCS < 1 %) (14808-60-7)
  - Barium Sulfate (7727-43-7)
  - Bis-[4-(2,3-epoxipropoxi)phenyl]propane (1675-54-3)
- Removed substances
  - reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) (25068-38-6)

### Substances that contribute to the classification (SECTION 2):

- New declared substances
  - Bis-[4-(2,3-epoxipropoxi)phenyl]propane (1675-54-3)
- Removed substances
  - reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 ) (25068-38-6)

### Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H411: Toxic to aquatic life with long lasting effects.  
H312+H332: Harmful in contact with skin or if inhaled.  
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: H312+H332 - Harmful in contact with skin or if inhaled.  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  
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.

### Classification procedure:

Skin Irrit. 2: Calculation method  
Skin Sens. 1: Calculation method  
Aquatic Chronic 2: Calculation method  
Acute Tox. 4: Calculation method  
Eye Irrit. 2: 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

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

## IMPLAREST EP (Comp B)



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

- 1.1 Product identifier:** IMPLAREST (Comp B)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- Relevant uses: Miscellaneous. For professional users/industrial user only.  
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:**  
GRUPO PUMA ESPAÑA S.L.  
AVDA. AGRUPACIÓN CÓRDOBA, NUM. 17  
14014 CÓRDOBA - CÓRDOBA - ESPAÑA  
Tfno.: +34 957 102 210 - Fax: +34 957 44 19 92  
fds@grupopuma.com  
http://www.grupopuma.com
- 1.4 Emergency telephone number:** +34 957 102 210 (08:30 – 13:30, 16:00 – 19:00)

### 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.

Acute Tox. 4: Acute toxicity, Category 4, H302+H332

Aquatic Acute 1: Hazardous to the aquatic environment, acute hazard, Category 1, H400

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard, Category 1, H410

Eye Dam. 1: Serious eye damage, Category 1, H318

Skin Corr. 1: Skin corrosion, Category 1, H314

Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

#### 2.2 Label elements:

##### CLP Regulation (EC) No 1272/2008:

Danger



##### Hazard statements:

Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Skin Corr. 1: H314 - Causes severe skin burns and eye damage.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

##### Precautionary statements:

P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of water.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

##### Supplementary information:

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## IMPLAREST EP (Comp B)



### SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

EUH071: Corrosive to the respiratory tract.

Contains 3-aminopropyl dimethylamine, 3-aminopropyl triethoxysilane, Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine.

#### Substances that contribute to the classification

Fatty acids C18 unsat, reaction products with triethylenetetramine; benzyl alcohol; m-phenylenebis(methylamine); 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.

\*\* Changes with regards to the previous version

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*

#### 3.1 Substance:

Non-applicable

#### 3.2 Mixture:

**Chemical description:** Mixture of substances

#### Components:

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

Identification	Chemical name/Classification	Concentration
CAS: 1226892-44-9 EC: 629-765-4 Index: Non-applicable REACH: 01-2119490750-36-XXXX	<b>Fatty acids C18 unsat, reaction products with triethylenetetramine<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317 - Danger	Self-classified 25 - <50 %
CAS: 100-51-6 EC: 202-859-9 Index: 603-057-00-5 REACH: 01-2119492630-38-XXXX	<b>benzyl alcohol<sup>(1)</sup></b> Regulation 1272/2008 Acute Tox. 4: H302+H332; Eye Irrit. 2: H319 - Warning	Self-classified 10 - <25 %
CAS: 1477-55-0 EC: 216-032-5 Index: Non-applicable REACH: 01-2119480150-50-XXXX	<b>m-phenylenebis(methylamine)<sup>(1)</sup></b> Regulation 1272/2008 Acute Tox. 4: H302+H332; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1B: H317; EUH071 - Danger	Self-classified 10 - <25 %
CAS: 61788-44-1 EC: 262-975-0 Index: Non-applicable REACH: 01-2119979575-18-XXXX	<b>Phenol, styrenated<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 2: H411 - Warning	Self-classified 10 - <25 %
CAS: 2855-13-2 EC: 220-666-8 Index: 612-067-00-9 REACH: 01-2119514687-32-XXXX	<b>3-aminomethyl-3,5,5-trimethylcyclohexylamine<sup>(1)</sup></b> Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317 - Danger	ATP ATP17 10 - <25 %
CAS: 68082-29-1 EC: 500-191-5 Index: Non-applicable REACH: 01-2119972320-44-XXXX	<b>Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1A: H317 - Danger	Self-classified 2,5 - <10 %
CAS: 186321-96-0 EC: 606-078-8 Index: Non-applicable REACH: 01-2119983521-35-XXXX	<b>Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine<sup>(1)</sup></b> Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger	Self-classified 1 - <2,5 %

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

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -



**IMPLAREST EP (Comp B)**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\* (continued)**

Identification	Chemical name/Classification		Concentration
CAS: 100-51-6 EC: 202-859-9 Index: 603-057-00-5 REACH: 01-2119492630-38-XXXX	<b>benzyl alcohol</b> <sup>(1)</sup>	ATP CLP00	1 - <2,5 %
	Regulation 1272/2008	Acute Tox. 4: H302+H332 - Warning	
CAS: 109-55-7 EC: 203-680-9 Index: Non-applicable REACH: 01-2119486842-27-XXXX	<b>3-aminopropyl dimethylamine</b> <sup>(1)</sup>	ATP CLP00	<1 %
	Regulation 1272/2008	Acute Tox. 4: H302; Flam. Liq. 3: H226; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	
CAS: 919-30-2 EC: 213-048-4 Index: 612-108-00-0 REACH: 01-2119480479-24-XXXX	<b>3-aminopropyl triethoxysilane</b> <sup>(1)</sup>	Self-classified	<1 %
	Regulation 1272/2008	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	

<sup>(1)</sup> 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	M-factor	
	Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	Acute
	Chronic	10

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
	Route	LD50	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	11 mg/L (ATEi)	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	11 mg/L (ATEi)	
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	Not relevant	
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LD50 oral	1090 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	11 mg/L (ATEi)	
3-aminopropyl dimethylamine CAS: 109-55-7 EC: 203-680-9	LD50 oral	1870 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	Not relevant	
3-aminopropyl triethoxysilane CAS: 919-30-2 EC: 213-048-4	LD50 oral	1491 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	Not relevant	

\*\* Changes with regards to the previous version

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

Request medical assistance immediately, showing the SDS of this product.

**By inhalation:**

- CONTINUED ON NEXT PAGE -



## IMPLAREST EP (Comp B)



### SECTION 4: FIRST AID MEASURES (continued)

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

#### **By skin contact:**

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

#### **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:**

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

#### **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, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

##### **Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

#### **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 (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

##### **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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

- CONTINUED ON NEXT PAGE -

## IMPLAREST EP (Comp B)



### SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

#### 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:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

#### 6.4 Reference to other sections:

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for 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

Minimum Temp.: 5 °C

Maximum Temp.: 30 °C

Maximum time: 24 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):

- CONTINUED ON NEXT PAGE -



**IMPLAREST EP (Comp B)**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	0,1 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0,492 mg/m <sup>3</sup>	Not relevant
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	40 mg/kg	Not relevant	8 mg/kg	Not relevant
	Inhalation	110 mg/m <sup>3</sup>	Not relevant	22 mg/m <sup>3</sup>	Not relevant
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	0,33 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	1,2 mg/m <sup>3</sup>	0,2 mg/m <sup>3</sup>
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	21 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	74 mg/m <sup>3</sup>	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	0,073 mg/m <sup>3</sup>
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine CAS: 68082-29-1 EC: 500-191-5	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	1,1 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	3,9 mg/m <sup>3</sup>	Not relevant
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine CAS: 186321-96-0 EC: 606-078-8	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	1 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	7,05 mg/m <sup>3</sup>	Not relevant
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	40 mg/kg	Not relevant	8 mg/kg	Not relevant
	Inhalation	110 mg/m <sup>3</sup>	Not relevant	22 mg/m <sup>3</sup>	Not relevant
3-aminopropyl dimethylamine CAS: 109-55-7 EC: 203-680-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	1,2 mg/m <sup>3</sup>	Not relevant
3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	2 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	14 mg/m <sup>3</sup>	Not relevant

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	Oral	Not relevant	Not relevant	0,05 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0,05 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0,09 mg/m <sup>3</sup>	Not relevant
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	20 mg/kg	Not relevant	4 mg/kg	Not relevant
	Dermal	20 mg/kg	Not relevant	4 mg/kg	Not relevant
	Inhalation	27 mg/m <sup>3</sup>	Not relevant	5,4 mg/m <sup>3</sup>	Not relevant
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	Oral	Not relevant	Not relevant	7,5 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	7,5 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	13,1 mg/m <sup>3</sup>	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Oral	Not relevant	Not relevant	0,526 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant

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**IMPLAREST EP (Comp B)**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine CAS: 68082-29-1 EC: 500-191-5	Oral	Not relevant	Not relevant	0,56 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0,56 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0,97 mg/m <sup>3</sup>	Not relevant
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine CAS: 186321-96-0 EC: 606-078-8	Oral	Not relevant	Not relevant	0,5 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0,5 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	1,74 mg/m <sup>3</sup>	Not relevant
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Oral	20 mg/kg	Not relevant	4 mg/kg	Not relevant
	Dermal	20 mg/kg	Not relevant	4 mg/kg	Not relevant
	Inhalation	27 mg/m <sup>3</sup>	Not relevant	5,4 mg/m <sup>3</sup>	Not relevant
3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	Oral	Not relevant	Not relevant	1 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	1 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	3,5 mg/m <sup>3</sup>	Not relevant

**PNEC:**

Identification				
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	STP	5,57 mg/L	Fresh water	0,0254 mg/L
	Soil	9,44 mg/kg	Marine water	0,00254 mg/L
	Intermittent	0,00294 mg/L	Sediment (Fresh water)	99,4 mg/kg
	Oral	0,002 g/kg	Sediment (Marine water)	9,94 mg/kg
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	STP	39 mg/L	Fresh water	1 mg/L
	Soil	0,456 mg/kg	Marine water	0,1 mg/L
	Intermittent	2,3 mg/L	Sediment (Fresh water)	5,27 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,527 mg/kg
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	STP	10 mg/L	Fresh water	0,094 mg/L
	Soil	2,44 mg/kg	Marine water	0,009 mg/L
	Intermittent	0,152 mg/L	Sediment (Fresh water)	12,4 mg/kg
	Oral	Not relevant	Sediment (Marine water)	1,24 mg/kg
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	STP	36,2 mg/L	Fresh water	0,004 mg/L
	Soil	0,0473 mg/kg	Marine water	0,0004 mg/L
	Intermittent	0,046 mg/L	Sediment (Fresh water)	0,248 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,0248 mg/kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	STP	3,18 mg/L	Fresh water	0,06 mg/L
	Soil	1,121 mg/kg	Marine water	0,006 mg/L
	Intermittent	0,23 mg/L	Sediment (Fresh water)	5,784 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,578 mg/kg
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine CAS: 68082-29-1 EC: 500-191-5	STP	3,84 mg/L	Fresh water	0,004 mg/L
	Soil	86,78 mg/kg	Marine water	0 mg/L
	Intermittent	0,043 mg/L	Sediment (Fresh water)	434,02 mg/kg
	Oral	Not relevant	Sediment (Marine water)	43,4 mg/kg
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine CAS: 186321-96-0 EC: 606-078-8	STP	1,58 mg/L	Fresh water	0,000186 mg/L
	Soil	11,1 mg/kg	Marine water	0,000019 mg/L
	Intermittent	0,00186 mg/L	Sediment (Fresh water)	0,005 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,0005 mg/kg
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	STP	39 mg/L	Fresh water	1 mg/L
	Soil	0,456 mg/kg	Marine water	0,1 mg/L
	Intermittent	2,3 mg/L	Sediment (Fresh water)	5,27 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,527 mg/kg

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**IMPLAREST EP (Comp B)**

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**



Identification				
3-aminopropylidimethylamine CAS: 109-55-7 EC: 203-680-9	STP	10 mg/L	Fresh water	0,073 mg/L
	Soil	0,104 mg/kg	Marine water	0,007 mg/L
	Intermittent	0,34 mg/L	Sediment (Fresh water)	0,735 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,073 mg/kg
	3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	STP	1,3 mg/L	Fresh water
	Soil	Not relevant	Marine water	Not relevant
	Intermittent	Not relevant	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant

**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		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: Butyl)		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	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 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
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.



**F.- Additional emergency measures**

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## IMPLAREST EP (Comp B)



### 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:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

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

V.O.C. (Supply):	13,99 % weight
V.O.C. density at 20 °C:	137,91 kg/m <sup>3</sup> (137,91 g/L)
Average carbon number:	5
Average molecular weight:	397,86 g/mol

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Fluid
Colour:	 Amber
Odour:	Aminic
Odour threshold:	Not relevant *

##### Volatility:

Boiling point at atmospheric pressure:	234 °C
Vapour pressure at 20 °C:	9 Pa
Vapour pressure at 50 °C:	82,67 Pa (0,08 kPa)
Evaporation rate at 20 °C:	Not relevant *

##### Product description:

Density at 20 °C:	985,8 kg/m <sup>3</sup>
Relative density at 20 °C:	0,986
Dynamic viscosity at 20 °C:	700 - 1300 cP
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	≈11,7 (at 0,1 %)
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

##### Flammability:

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

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## IMPLAREST EP (Comp B)



### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flash Point:	110 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	300 °C
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

#### Particle characteristics:

Median equivalent diameter:	Non-applicable
-----------------------------	----------------

#### 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 °C:	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	Precaution	Precaution	Not applicable

#### 10.5 Incompatible materials:

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

#### 10.6 Hazardous decomposition products:

Contains substances which require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated.

### 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

##### Dangerous health implications:

\*\* Changes with regards to the previous version

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**IMPLAREST EP (Comp B)**

**SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)**

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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Corrosive to the respiratory tract

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

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- 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

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	Route	Toxicity	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg (ATEi)	Rat
	LD50 dermal	2500 mg/kg	
	LC50 inhalation	11 mg/L (ATEi)	
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	LD50 oral	2197 mg/kg	Rat
	LD50 dermal	3166 mg/kg	Rabbit
	LC50 inhalation	158 mg/L (4 h)	Rat
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LD50 oral	500 mg/kg (ATEi)	Rat
	LD50 dermal	2500 mg/kg	
	LC50 inhalation	11 mg/L (ATEi)	

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp B)



### SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	1030 mg/kg (ATEi)		Rat
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	1090 mg/kg (ATEi)		Rat
3-aminopropyldimethylamine CAS: 109-55-7 EC: 203-680-9	1870 mg/kg		Rat
3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	1491 mg/kg	4000 mg/kg	Rat Rabbit

#### 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 \*\*

Very toxic to aquatic life with long lasting effects.

#### 12.1 Toxicity:

##### Product-specific aquatic toxicity:

LC50	Acute toxicity	Species	Genus
0,58 mg/L (96 h)	Non-applicable	Fish	

##### Substance-specific aquatic toxicity:

##### Acute toxicity:

Identification	Concentration	Species	Genus
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	LC50 0,19 mg/L (96 h) EC50 0,18 mg/L (48 h) EC50 0,476 mg/L (72 h)	Danio rerio Daphnia magna Pseudokirchneriella subcapitata	Fish Crustacean Algae
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LC50 646 mg/L (48 h) EC50 400 mg/L (24 h) EC50 79 mg/L (3 h)	Leuciscus idus Daphnia magna Scenedesmus subspicatus	Fish Crustacean Algae
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	LC50 88 mg/L (96 h) EC50 15 mg/L (48 h) EC50 20 mg/L (72 h)	Oryzias latipes Daphnia magna Selenastrum capricornutum	Fish Crustacean Algae
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	LC50 5,6 mg/L (96 h) EC50 16 mg/L (48 h) EC50 9 mg/L (72 h)	N/A Daphnia magna N/A	Fish Crustacean Algae
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	LC50 110 mg/L (96 h) EC50 388 mg/L (48 h) EC50 Not relevant	Leuciscus idus N/A	Fish Crustacean
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine CAS: 68082-29-1 EC: 500-191-5	LC50 7 mg/L (96 h) EC50 7 mg/L (48 h) EC50 4 mg/L (72 h)	Danio rerio Daphnia magna Pseudokirchneriella subcapitata	Fish Crustacean Algae

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp B)

### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Concentration	Species	Genus	
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine CAS: 186321-96-0 EC: 606-078-8	LC50	1,8 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0,7 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0,77 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	LC50	646 mg/L (48 h)	Leuciscus idus	Fish
	EC50	400 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	79 mg/L (3 h)	Scenedesmus subspicatus	Algae
3-aminopropyl dimethylamine CAS: 109-55-7 EC: 203-680-9	LC50	122 mg/L (96 h)	Leuciscus idus	Fish
	EC50	68,3 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	56,2 mg/L (72 h)	Scenedesmus subspicatus	Algae
3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	LC50	934 mg/L (96 h)	Danio rerio	Fish
	EC50	331 mg/L (48 h)	N/A	Crustacean
	EC50	603 mg/L (72 h)	Desmodesmus subspicatus	Algae

#### Chronic toxicity:

Identification	Concentration	Species	Genus	
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	NOEC	Not relevant		
	NOEC	0,27 mg/L	Daphnia magna	Crustacean
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	NOEC	48,897 mg/L	N/A	Fish
	NOEC	51 mg/L	Daphnia magna	Crustacean
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	NOEC	Not relevant		
	NOEC	4,7 mg/L	Daphnia magna	Crustacean
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	NOEC	0,0618 mg/L	Danio rerio	Fish
	NOEC	0,2 mg/L	Daphnia magna	Crustacean
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	NOEC	Not relevant		
	NOEC	3 mg/L	Daphnia magna	Crustacean
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	NOEC	48,897 mg/L	N/A	Fish
	NOEC	51 mg/L	Daphnia magna	Crustacean
3-aminopropyl dimethylamine CAS: 109-55-7 EC: 203-680-9	NOEC	Not relevant		
	NOEC	3,64 mg/L	Daphnia magna	Crustacean

#### 12.2 Persistence and degradability:

##### Substance-specific information:

Identification	Degradability		Biodegradability	
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	BOD5	Not relevant	Concentration	150 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	22,7 %
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	94 %
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BOD5	Not relevant	Concentration	14 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	49 %
Phenol, styrenated CAS: 61788-44-1 EC: 262-975-0	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	7 %
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	BOD5	Not relevant	Concentration	7 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	8 %

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp B)



### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Degradability		Biodegradability	
Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine CAS: 186321-96-0 EC: 606-078-8	BOD5	Not relevant	Concentration	2 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	9 %
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	94 %
3-aminopropyltriethoxysilane CAS: 919-30-2 EC: 213-048-4	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	67 %

#### 12.3 Bioaccumulative potential:

##### Substance-specific information:

Identification	Bioaccumulation potential	
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BCF	0
	Pow Log	1.1
	Potential	Low
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	BCF	3
	Pow Log	0.18
	Potential	Low
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine CAS: 68082-29-1 EC: 500-191-5	BCF	77
	Pow Log	
	Potential	Moderate
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	BCF	0.3
	Pow Log	1.1
	Potential	Low

#### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Fatty acids C18 unsat, reaction products with triethylenetetramine CAS: 1226892-44-9 EC: 629-765-4	Koc	940000	Henry	Not relevant
	Conclusion	Immobile	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Koc	Not relevant	Henry	Not relevant
	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	3,679E-2 N/m (25 °C)	Moist soil	Not relevant
m-phenylenebis(methylamine) CAS: 1477-55-0 EC: 216-032-5	Koc	1300	Henry	Not relevant
	Conclusion	Low	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
3-aminomethyl-3,5,5-trimethylcyclohexylamine CAS: 2855-13-2 EC: 220-666-8	Koc	928	Henry	4,46E-4 Pa·m <sup>3</sup> /mol
	Conclusion	Low	Dry soil	No
	Surface tension	Not relevant	Moist soil	No
benzyl alcohol CAS: 100-51-6 EC: 202-859-9	Koc	Not relevant	Henry	Not relevant
	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	3,679E-2 N/m (25 °C)	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:

\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp B)



### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

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)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Hazardous

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

HP8 Corrosive, HP14 Ecotoxic, HP6 Acute Toxicity, HP13 Sensitising

#### 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 \*\*

#### Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- 14.1 UN number or ID number:** UN3267
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Fatty acids C18 unsat, reaction products with triethylenetetramine)
- 14.3 Transport hazard class(es):** 8  
Labels: 8
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** Yes
- 14.6 Special precautions for user**  
Special regulations: 274  
Tunnel restriction code: E  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

#### Transport of dangerous goods by sea:

With regard to IMDG 41-22:


\*\* Changes with regards to the previous version

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## IMPLAREST EP (Comp B)

### SECTION 14: TRANSPORT INFORMATION \*\* (continued)

	<b>14.1 UN number or ID number:</b>	UN3267
	<b>14.2 UN proper shipping name:</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Fatty acids C18 unsat, reaction products with triethylenetetramine)
	<b>14.3 Transport hazard class(es):</b>	8
	Labels:	8
	<b>14.4 Packing group:</b>	II
	<b>14.5 Marine pollutant:</b>	Yes
	<b>14.6 Special precautions for user</b>	
	Special regulations:	274
	EmS Codes:	F-A, S-B
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	SGG18
	<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Not relevant

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

	<b>14.1 UN number or ID number:</b>	UN3267
	<b>14.2 UN proper shipping name:</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Fatty acids C18 unsat, reaction products with triethylenetetramine)
	<b>14.3 Transport hazard class(es):</b>	8
	Labels:	8
	<b>14.4 Packing group:</b>	II
	<b>14.5 Environmental hazards:</b>	Yes
	<b>14.6 Special precautions for user</b>	
	Physico-Chemical properties:	see section 9
	<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Not relevant

\*\* Changes with regards to the previous version

### 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: *benzyl alcohol (100-51-6) - PT: (6)*; *benzyl alcohol (100-51-6) - PT: (6)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EC) No 1005/2009, 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:

Section	Description	Lower-tier requirements	Upper-tier requirements
E1	ENVIRONMENTAL HAZARDS	100	200

#### 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.

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## IMPLAREST EP (Comp B)

### SECTION 15: REGULATORY INFORMATION (continued)

**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.:**

COMMISSION REGULATION (EU) 2020/878

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
    - 3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)
    - Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)
    - benzyl alcohol (100-51-6)
    - Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine (186321-96-0)
    - Phenol, styrenated (61788-44-1)
    - 3-aminopropyltriethoxysilane (919-30-2)
    - Fatty acids C18 unsat, reaction products with triethylenetetramine (1226892-44-9)
  - Removed substances
    - 3,6-diazaoctanethylenediamin (112-24-3)
    - 2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)
    - Salicylic acid (69-72-7)
    - Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)
- Substances that contribute to the classification (SECTION 2):
- New declared substances
    - 3-aminomethyl-3,5,5-trimethylcyclohexylamine (2855-13-2)
    - benzyl alcohol (100-51-6)
    - Fatty acids C18 unsat, reaction products with triethylenetetramine (1226892-44-9)
  - Removed substances
    - benzyl alcohol (100-51-6)
    - 2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)
    - 3-aminopropyldimethylamine (109-55-7)
- CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
- Pictograms
  - Hazard statements
  - Substances contained in EUH208:
    - New declared substances
      - 3-aminopropyldimethylamine (109-55-7)
      - Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine (68082-29-1)
    - 1) Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine (186321-96-0)
    - 3-aminopropyltriethoxysilane (919-30-2)
    - Removed substances
      - 3,6-diazaoctanethylenediamin (112-24-3)
      - Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)
- TRANSPORT INFORMATION (SECTION 14):
- UN number
- Texts of the legislative phrases mentioned in section 2:**

\*\* Changes with regards to the previous version

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**IMPLAREST EP (Comp B)****SECTION 16: OTHER INFORMATION \*\* (continued)**

H314: Causes severe skin burns and eye damage.  
H318: Causes serious eye damage.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.  
H317: May cause an allergic skin reaction.  
H302+H332: Harmful if swallowed or if inhaled.

**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.  
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
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.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.  
Skin Corr. 1C: 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.  
Skin Sens. 1B: H317 - May cause an allergic skin reaction.

**Classification procedure:**

Skin Corr. 1: Calculation method  
Eye Dam. 1: Calculation method  
Aquatic Acute 1: Calculation method  
Aquatic Chronic 1: Calculation method  
Skin Sens. 1A: Calculation method  
Acute Tox. 4: 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

*\*\* Changes with regards to the previous version*

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -