EPOXY MIX 140 component A

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

1.1 Product Identifier

Commercial name :EPOXY MIX 140 component A

UFI :F030-N0K4-X00C-TJW3

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

Utilization of substance/of the mixture : Sticker

1.3 Details of the supplier of the safety data sheet

Company : CECCHI GUSTAVO & C. Srl
Via M. Coppino 253 55049
Viareggio (LU) Italy

Telephone : + 39 0584 383694

Email address : info@cecchi.it

1.4 Emergency telephone number

Company Tel. +39 0584 383694 (Monday-Friday 8:30-12:30, 14:00-18:30)

CAVp “Hosp. Pediatric Bambino Gesù” Rome Piazza Sant'Onofrio, 4 00165 Tel.06-68593726
Az. Osp. Univ. Foggia Foggia V.le Luigi Pinto, 1 71122 Tel.0881-732326
Hospital "A. Cardarelli" Naples Via A. Cardarelli, 9 80131 Tel.081-7472870 CAV Policlinico "Umberto I" Rome Viale del Policlinico, 155 00161 Tel.06-49978000 CAV Policlinico "A. Gemelli" Rome Largo Agostino Gemelli, 8 00168 Tel.06-3054343
Hospital "Careggi" Medical Toxicology Unit Florence Largo Brambilla, 3 50134 Tel.055-7947819
CAV National Center for Toxicological Information Pavia Via Salvatore Maugeri, 10 27100 Tel.0382-24444
hosp. Niguarda Ca' Granda Milan Piazza Ospedale Maggiore,3 20162 Tel.02-66101029
Papa Giovanni XXII Hospital Bergamo Piazza OMS, 1 24127 Tel.800883300

SECTION 2: hazard identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) N. 1272/2008) Skin

irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Long-term (chronic) hazard to the aquatic environment, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Elements of the label

Labeling (REGULATION (EC) No. 1272/2008) Hazard pictograms :

Warning : Attention

Warning notices	:	H315	Causes skin irritation.
		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation. Toxic to
		H411	aquatic life with long lasting effects.
Cautionary advice	:	**Prevention:**	
		P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.
		P273	Do not disperse in the environment.
		P280	Wear gloves/ eye protection/ face protection.
		Reaction:	
		P333 + P313	In case of skin irritation or rash: consult a doctor.
		P337 + P313	If eye irritation persists, consult a doctor.
		P362 + P364	Remove all contaminated clothing and wash before reuse.

Hazardous components to be indicated on the label:

Reaction product: bisphenol-F-epichlorohydrin; epoxy resins (average molecular weight <= 700)

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane

Reaction product of Epichlorohydrin/Bisphenol-A

1,6-bis(2,3-epoxypropoxy)hexane

2.3 Other dangers

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Epoxy constituents

Hazardous components

Chemical Name	CAS No EC no Number of registration	Classification (REGULATION (EC) No. 1272/2008)	concentration And (%)
Reaction product: bisphenol-Fepiclohydrin; epoxy resins (average molecular weight <= 700)	9003-36-5 01-2119454392-40	Skin Irrit.2; H315 Skin Sens.1A; H317 Aquatic Chronic2; H411	> = 30-< 50
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane	1675-54-3 216-823-5 01-2119456619-26	Eye Irrit.2; H319 Skin Irrit.2; H315 Skin Sens.1; H317 Aquatic Chronic2; H411	> = 20-< 25
Reaction product of Epichlorohydrin/Bisphenol-A	25036-25-3	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317	> = 12.5-< 20
1,6-bis(2,3-epoxypropoxy)hexane	933999-84-9 01-2119463471-41	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317 Aquatic Chronic3; H412	> = 5-< 7
[3-(2,3-epoxypropoxy)propyl]trimethoxysilano	2530-83-8 219-784-2 01-2119513212-58	Eye Dam.1; H318	> = 1-<3

For explanations of abbreviations see paragraph 16.

SECTION 4: first aid measures

4.1 Description of first aid measures General information : Keep warm in a quiet room.
Show this safety data sheet to the attending physician.
Take off all contaminated clothing immediately.

If inhaled : Take to fresh air.
Put the person concerned in a resting position and keep him warm.
If unconscious, place on side in stable position and consult a doctor.
If symptoms persist, consult a doctor. In case of irregular breathing or respiratory arrest, give artificial respiration.

In case of skin contact : Wash immediately with soap and plenty of water. Do not use solvents or thinners.
If it gets on clothing, remove clothing.

If skin irritation persists, call a doctor.

In case of contact with eyes : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a physician. If this is easy, remove contact lenses, if they are worn.

If ingested : Keep at rest.
Do not induce vomiting without medical advice. Keep the respiratory tract clean.
If symptoms persist, consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : irritant effects
Redness
sensitizing effects

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : First Aid procedure should be agreed
consulting the competent occupational physician.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Foam
Sand
Carbon dioxide (CO2)
Water mist

Unsuitable extinguishing media : Nebulised water jet

5.2 Special hazards arising from the substance or mixture

Specific dangers vs the fire : Pressure in hermetically sealed containers can increase under the influence of heat.
Cool closed containers near the flames with nebulised water.

5.3 Advice for firefighters

Protection devices special for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : In case of fire and/or explosion do not breathe fumes. Use extinguishing systems compatible with the local situation and the surrounding environment.

Immediately evacuate personnel to safe areas. Prevent water from fire extinguishers from contaminating surface water or groundwater.
Dispose of the contaminated water used for extinguishing and the residue of the fire according to the regulations in force.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Individual precautions : Refer to protective measures listed in sections 7 and 8.
Evacuate personnel to safe areas.
Use personal protective equipment.
Provide adequate ventilation.
Inform the responsible authorities in the event of a gas leak, or if it enters pipes, soil or sewers.

6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled dumping of the product in the environment.
Prevent the material from entering drains or water courses.

Local authorities must be notified if leaks cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods of reclamation : Dry with inert material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Contain and collect spillage with non-combustible absorbent material (such as sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local or national regulations (see section 13).

Collect and transfer to a properly labeled container.

6.4 Reference to other sections

See Section 8 for personal protective equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Instructions for use: safe Ensure sufficient air exchange and/or exhaust in workplaces.
Avoid inhalation, ingestion and contact with skin and eyes.

Wear protective clothing.
Persons with a history of skin hypersensitivity or asthma, chronic allergies or recurrent respiratory disease should not be employed in any process in which

this mixture is used.

Indications against fire and explosion	:	Keep away from open flames, hot surfaces and sources of ignition.
Hygiene measures	:	Provide adequate ventilation. Wash hands and face before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Warehouse and container requirements: containers		Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.
Directions for the storage together with other products	:	Keep away from oxidizing agents, strong acids or bases and amines. Keep the product and empty containers away from heat and ignition sources. Keep away from food and drink.
Other information	:	Stable under normal environmental conditions of temperature and pressure.

7.3 Particular End Uses

Particular uses : Consult the technical instructions for use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane	:	End use: Workers Exposure routes: Skin contact Potential Health Effects: Acute systemic effects, Long-term systemic effects Value: 8.33 mg/kg End use: Workers Route of Exposure: Inhalation Potential Health Effects: Acute systemic effects, Long-term local effects Value: 12.25 mg/m3 End Use: Consumers Exposure routes: Skin contact Potential Health Effects: Acute systemic effects, Long-term systemic effects Value: 3.571 mg/kg End Use: Consumers Exposure Routes: Ingestion Potential Health Effects: Acute systemic effects, Long-term systemic effects Value: 0.75 mg/kg

1,6-bis(2,3-epoxypropoxy)hexane	:	End use: Workers Exposure routes: Skin contact Potential Health Effects: Long-term systemic effects Value: 2.8 mg/kg End use: Workers Route of Exposure: Inhalation Potential Health Effects: Long-term systemic effects Value: 4.9 mg/m3
[3-(2,3-epoxypropoxy)propyl]trimethossisilane	:	End use: Workers Exposure routes: Skin contact Potential Health Effects: Acute systemic effects Value: 21 mg/kg Route of Exposure: Inhalation Potential Health Effects: Acute systemic effects Value: 147 mg/m3 End use: Workers Potential Health Effects: Long-term systemic effects Value: 21 mg/kg End use: Workers Potential Health Effects: Long-term systemic effects Value: 147 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane	:	Fresh water Value: 0.006 mg/l Sea water Value: 0.0006 mg/l Intermittent releases Value: 0.018 mg/l Sewage treatment plant Value: 10 mg/l Fresh water sediment Value: 0.996 mg/kg Marine sediment Value: 0.0996 mg/kg Soil Value: 0.196 mg/kg
1,6-bis(2,3-epoxypropoxy)hexane	:	Sewage treatment plant Value: 1 mg/l Fresh water Value: 0.0115 mg/l Fresh water sediment Value: 0.283 mg/kg Sea water Value: 0.00115 mg/l Marine sediment Value: 0.0283 mg/kg Soil Value: 0.223 mg/kg

[3-(2,3-epoxypropoxy)propyl]trimethossisilane	:	Sewage treatment plant Value: 10 mg/l Fresh water Value: 1 mg/l Sea water Value: 0.1 mg/l Intermittent releases Value: 1 mg/l Fresh water sediment Value: 0.79 mg/kg Soil Value: 0.13 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Effective exhaust ventilation system effective ventilation in all process areas

Individual protection

Eye protection	:	Do not wear contact lenses. Safety goggles with side protection in compliance with EN166 standard Make sure that eyewash stations and emergency showers are close to the workstation.
Hand protection Material	:	Protective gloves according to EN 374.
Skin and body protection	:	Protection suit
Respiratory protection	:	Use respiratory protection, unless adequate local exhaust ventilation is provided or exposure assessment demonstrates exposure meets recommended guidelines. In case of vapor formation, use a respirator with an approved filter. The equipment must comply with EN 14387 Apply the necessary technical measures not to exceed the occupational exposure limit values. This can be obtained through a good general air exchange or, if practicable, through a local aspirator.
Protection arrangements	:	Avoid contact with skin. Wear suitable protective clothing.

SECTION 9: physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	dough
Color	:	white

Odor	: light
Olfactory threshold	: not determined
pH	: 4 - 6.1%
Melting point/freezing point	: Not applicable
Boiling point/range	: Not applicable
Flash point	: 150°C
Evaporation rate	: not determined
Upper explosive limit	: Not applicable
Lower explosive limit	: Not applicable
Vapor pressure	: Not applicable
Relative vapor density	: not determined
Density	: 1.18 g/cm 3 (25 °C)
Apparent density	: not determined
Solubility/solubilities.	
Solubility in other solvents	: not determined
Partition coefficient: noctanol/water	: No data available
Ignition temperature	: Not applicable
Temperature of self-ignition	: Not applicable
Thermal decomposition	: Method: No data available
Viscosity	
Viscosity, dynamics	: 350.000 - 450.000 mPa.s (25 °C)
Viscosity, kinematics	: not determined
Explosive properties	: Not applicable
Oxidizing properties	: Not applicable

9.2 other information

Surface tension	:	not determined
Sublimation point	:	Not applicable

SECTION 10: stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

dangerous reactions : Reacts with the following substances:
Bases
Strong oxidizing agents
Avoid amines.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as intended instructions.

10.5 Incompatible materials

Materials to avoid : Incompatible with oxidizing agents.

10.6 Hazardous decomposition products

Decomposition products : dangerous — This product can release the following: Carbon monoxide, carbon dioxide or unburnt hydrocarbons (smoke).

SECTION 11: toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	:	Remarks: No data available
Acute toxicity for inhalation	:	Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available
Acute toxicity (by other routes of administration)	:	Remarks: No data available

Components:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 420 GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Acute oral toxicity : LD50 (Rat): 2,900 mg/kg Method: OECD Test Guideline 401 GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Acute toxicity for inhalation : LC50 (Rat, male and female): > 5.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/fog
Method: OECD Test Guideline 403 GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male): 4,250 mg/kg Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Remarks: No data available

Components:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:
Species: On rabbit
Exposure time: 4 hours
Method: OECD Test Guideline 404 Result:
Irritating to skin
BPL: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:
Species: On rabbit
Method: OECD Test Guideline 404 Result: No skin irritation

Serious eye damage/irritation

Product:

Remarks: No data available

Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:
Species: On rabbit
Method: OECD Test Guideline 405 Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Product:
Remarks: No data available

Components:
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane: Test Type: Mouse Local Lymph Node assay (LLNA) Species: Mouse
Method: OECD Test Guideline 429
Result: May cause sensitization by skin contact. BPL: yes

1,6-bis(2,3-epoxypropoxy)hexane:
Test Type: Mouse Local Lymph Node assay (LLNA)
Route of Exposure: Dermal
Species: Mouse
Method: OECD Test Guideline 429
Result: May cause sensitization by skin contact. BPL: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:
Test Type: Buehler Test Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation. BPL: yes

Germ cell mutagenicity

Carcinogenicity

Product:
Remarks: No data available

Reproductive toxicity

Product:

Effects on fertility	:	Remarks: No data available
		Remarks: No data available
Effects on fetal development	:	Remarks: No data available. Remarks: No data available

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

Remarks: Not applicable

Specific target organ toxicity (STOT) - repeated exposure Repeated dose toxicity

Product:
Remarks: No data available

Aspiration toxicity

Components:
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:
There is no classification for aspiration toxicity

Further information

Product:
Remarks: No data available

SECTION 12: ecological information

12.1 Toxicity

Product:

Toxicity to fish	: Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	: Remarks: No data available

Components:
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Daphnia toxicity e for other aquatic invertebrates	: EC50 (Daphnia (water flea)): 1.7 mg/l Exposure time: 48 h Type of test: Static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 0.3mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test type: semi-static test Method: OECD Test Guideline 211 GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 30 mg/l Exposure time: 96 h Type of test: Semi-static test Method: OECD Test Guideline 203 GLP: yes

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure time: 48 h Type of test: Static test Method: OECD Test Guideline 202 GLP: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): 55 mg/l Exposure time: 96 h Type of test: Semi-static test Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: > 100 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test type: semi-static test Method: OECD Test Guideline 211 GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability	:	Remarks: No data available
Physico-chemical elimination	:	Remarks: No data available

Components:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Biodegradability	:	Result: Not readily biodegradable. Method: OECD Test Guideline 301F GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Biodegradability	:	Test type: aerobic Result: Inherently biodegradable. Method: OECD Test Guideline 301D GLP: yes

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane:

Biodegradability	:	Test type: aerobic Result: Not readily biodegradable. Method: Directive 67/548/EEC, Annex V, C.4.A. BPL: yes

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	Remarks: No data available

Components:

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane:

Partition coefficient: n- : octanol/water	log Pow: 3.242 (25°C) pH: 7.1 Method: OECD Test Guideline 117 GLP: yes

1,6-bis(2,3-epoxypropoxy)hexane:

Partition coefficient: n- : octanol/ water	log Pow: 0.822 (20°C) pH: 6 - 8 Method: OECD Test Guideline 107 GLP: yes

12.4 Mobility in soil

Components:

1,6-bis(2,3-epoxypropoxy)hexane:

Diffusion in the various sectors: environmental	log Koc: 2.98 Method: OECD Test Guideline 121

12.5 Results of PBT and vPvB assessment

Product:

Assessment	: This substance/mixture contains no components considered either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information	:	Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: In accordance with local and national regulations. Dangerous container when empty. Do not dispose of as household waste. Do not mix waste from different sources during collection.
Contaminated containers	: Empty containers should be taken to an approved site for recycling or disposal.

SECTION 14: transport information

14.1 UN number

ADR/RID/ADN	:	UN 3077
IMDG extension	:	UN 3077
IATA	:	UN 3077

14.2 UN proper shipping name

ADR/RID/ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (Epoxy resin)
IMDG extension	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (epoxy resin)
IATA	:	Environmentally hazardous substance, solid, nos (Epoxy resin)

14.3 Transport hazard classes

ADR/RID/ADN	:	9
IMDG extension	:	9
IATA	:	9

14.4 Packing group

ADR/RID/ADN

Packing group	:	III
Classification code	:	M7
Hazard identification number	:	90
Labels	:	9
Tunnel restriction code	:	-
Remarks	:	ADR: These substances, when carried in single or combined packagings containing a net quantity per single or inner packing less than or equal to 5 liters for liquids or having a net mass per single or inner packing less than or equal to 5 kg for solids , are not subject to any other provision of ADR provided that the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

IMDG extension

Packing group	:	III
Labels	:	9
EmS Code	:	FA, SF
Remarks	:	IMDG: Marine pollutants packed in individual or combination packagings containing an individual or inner packaging net quantity of 5 liters or less for liquids or with an individual or inner packaging net mass of 5 kg or less for solids are not subject to all other provisions of this Code relating to marine pollutants provided

that the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants that also meet the criteria for inclusion in another hazard class, all provisions of this code relating to additional hazards continue to apply.

IMDG Code segregation group - none

IATA

Packing Instructions (Cargo Aircraft)	:	956
Packing Instructions (Passenger Aircraft)	:	956
Packing group	:	III
Labels	:	9
Remarks	:	IATA: These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of less than or equal to 5 liters for liquids or having a net mass of 5 kg or less for solids, are not subject to other provisions of this Regulation provided that the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

14.5 Environmental hazards

ADR/RID/ADN

Dangerous for the environment : Yes

IMDG extension

Marine pollutant : Yes

IATA

Dangerous for the environment : Yes

14.6 Special precautions for users

Remarks : The transport of dangerous goods, including loading and lo unloading, must be carried out by people who have received the necessary training required by the modal regulations.

14.7 Transport in bulk according to annex II of MARPOL 73/78 and the IBC code Not applicable to the product in its supplied form.

SECTION 15: Regulatory information

15.1 Safety, health and environmental laws and regulations specific to the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain substances, : Not applicable

dangerous preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	:	This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57). Not
REACH - List of substances subject to authorization (Annex XIV)	:	applicable

Regulation (EC) no. 649/2012 of the European Parliament and of the Council on the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	DANGERS FOR THE ENVIRONMENT	200 t	500 t

15.2 Chemical safety assessment

Not applicable

SECTION 16: other information

The points that have undergone significant changes compared to the previous version are highlighted with two vertical lines in the body of this document.

Full text of the H-Statements

H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction. Causes
H318	:	serious eye damage.
H319	:	Causes serious eye irritation.
H411	:	Toxic to aquatic life with long lasting effects. Harmful to
H412	:	aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard Serious eye damage
Eye Dam.	:	
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitization

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemicals; ASTM - American Society for Testing of Materials; bw - Body weight; CLP - Classification, Labeling and Packaging Regulation; Regulation (EC) No. 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardization; DSL - Domestic List of Substances (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Load rate associated with x% response; EmS - Emergency Program; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System;

GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half of the maximum inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemicals China; IMDG - International Maritime Transport of Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Inventory of Existing Chemicals; LC50 - 50% lethal concentration for a test population; LD50 - Lethal dose 50% for a test population (median lethal dose); MARPOL - International Convention for the Prevention of Pollution from Ships; nos - not otherwise specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observed Effect Load Rate; NZIoC - New Zealand Chemicals Inventory; OECD - Organization for Economic Co-operation and Development; OPPTS - Bureau of Chemical Safety and Pollution Prevention; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Chemical Substances Inventory of the Philippines; (Q)SAR - (Quantitative) Structure Activity Relationships; REACH - Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, the authorization and restriction of chemicals; RID - Regulations concerning the international rail transport of dangerous goods; SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bioaccumulative for dangerous substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bioaccumulative for dangerous substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bioaccumulative

Further information

Directions on training : Provision of information, instructions to operators and training.

Classification of the mixture:		**Classification procedure:**
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information contained in this Safety Data Sheet is correct according to our best knowledge of the product at the time of publication and should not be considered a guarantee or specification of product quality.

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