Safety Data Sheet

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

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

1.1. Product identifier

Code: **139200-**
Product name **EPOXYMASTIC IB**

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

Intended use **Component "A" for two components paint.**

1.3. Details of the supplier of the safety data sheet

Name **Ti.Pi.Ci. S.a.s.**
Full address **Via Val Lerone, 21**
District and Country **16011 Arenzano (GE)**
Italy
Tel. +39 010 9111368
Fax +39 010 9134188
e-mail address of the competent person
responsible for the Safety Data Sheet **laboris@tipici.net**

1.4. Emergency telephone number

For urgent inquiries refer to **Centro Antiveleni di Bergamo +39800883300 (Azienda Ospedaliera Papa Giovanni XXII - Bergamo)**
Centro Antiveleni di Firenze +39055/7947819 (CAV Ospedale Careggi - Firenze)
Centro Antiveleni di Foggia +39800183459 (Az. Osp. Univ. Foggia - Foggia)
Centro Antiveleni di Milano +3902/66101029 (CAO Ospedale Niguarda Cà Granda - Milano)
Centro Antiveleni di Napoli +39081/5453333 (CAV Ospedale Cardarelli - Napoli)
Centro Antiveleni di Pavia +390382/24444 (CAV IRCCS Fondazione Maugeri - Pavia)
Centro Antiveleni di Roma +3906/3054343 (CAV Policlinico Gemelli - Roma)
Centro Antiveleni di Roma +3906/49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni di Roma +3906/68593726 (CAV Osp. Pediatrico Bambino Gesù - Roma)
Centro Antiveleni di Verona +39800011858 (Azienda Ospedaliera Integrata - Verona)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classification and indication:

Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity,	H412	Harmful to aquatic life with long lasting effects.

category 3

2.2. Label elements

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

Hazard pictograms:

Signal words: Danger

Hazard statements:

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P310	Immediately call a POISON CENTER / doctor / . . .
P264	Wash with fresh water thoroughly after handling.

Contains: Adduct of aliphatic polyamines
3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with all-oil fatty acids and triethylenetetramine
Phenol, methylstyrenated
3,6-diazaoctane-1,8-diamine
3,6,9,12-tetraazatetradecane-1,14-diamine; pentaethylenehexamine
3,6,9-triazaundecane-1,11-diamino

VOC (Directive 2004/42/EC) :

Two - pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition :	101,83	
Limit value:	500,00	
- Catalysed with :	50,00 %	CAT. per EPOXYMASTIC IB

2.3. Other hazards

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

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
Phenol, methylstyrenated		
INDEX	17 ≤ x < 18	Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC -		
CAS 68512-30-1		
BENZYL ALCOHOL		
INDEX 603-057-00-5	11 ≤ x < 12	Acute Tox. 4 H302, Acute Tox. 4 H332
EC 202-859-9		LD50 Oral: 1230 mg/kg, STA Inhalation vapours: 11 mg/l
CAS 100-51-6		
Adduct of aliphatic polyamines		
INDEX -	4,5 ≤ x < 5	Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317
EC 500-101-4		
CAS 38294-64-3		
REACH Reg. 02-2119668117-34-0000		
3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE		
INDEX 612-067-00-9	3 ≤ x < 3,5	Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317
EC 220-666-8		Skin Sens. 1A H317: ≥ 0,001%
CAS 2855-13-2		LD50 Oral: 1030 mg/kg
REACH Reg. 01-2119480150-50-XXXX		
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with all-oil fatty acids and triethylenetetramine		
INDEX -	3 ≤ x < 3,5	Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 2 H411
EC 500-191-5		
CAS 68082-29-1		
REACH Reg. 01-2119972320-44-0002		
Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction		
INDEX -	3 ≤ x < 3,5	Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 2 H411
EC 701-046-0		
CAS -		
REACH Reg. 01-2119972321-42-0001		
SALICYLIC ACID		

INDEX	2,5 ≤ x < 3	Acute Tox. 4 H302, Eye Dam. 1 H318
EC -		STA Oral: 500 mg/kg
CAS 8052-31-1		
3,6,9,12-tetraazatetradecane-1,14-diamine; pentaethylenehexamine		
INDEX 612-064-00-2	0,5 ≤ x < 1	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 223-775-9		LD50 Oral: 1600 mg/kg, STA Dermal: 1100 mg/kg
CAS 4067-16-7		
REACH Reg. 01-2119485826-22-XXXX		
3,6,9-triazaundecane-1,11-diamino		
INDEX -	0,5 ≤ x < 1	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 292-587-7		LD50 Oral: 1600 mg/kg, STA Dermal: 1100 mg/kg
CAS 90640-66-7		
REACH Reg. 01-2119487290-37-XXXX		
3,6-diazaoctane-1,8-diamine		
INDEX -	0,5 ≤ x < 1	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC 292-588-2		LD50 Oral: 1716 mg/kg, LD50 Dermal: 1465 mg/kg
CAS 90640-67-8		
REACH Reg. 01-2119487919-13-XXXX		
QUARTZ		
INDEX -	0,1 ≤ x < 0,2	STOT RE 2 H373
EC 238-878-4		
CAS 14808-60-7		
2-BUTOXYETHANOL		
INDEX 603-014-00-0	0 ≤ x < 0,1	Acute Tox. 3 H331, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		LD50 Oral: 1200 mg/kg, LC50 Inhalation vapours: 3 mg/l/4h
CAS 111-76-2		

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

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

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

Phenol, methylstyrenated

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,014	mg/l
Normal value in marine water	0,0014	mg/l
Normal value for fresh water sediment	1064	mg/kg/d
Normal value for marine water sediment	106	mg/kg/d
Normal value for water, intermittent release	0,14	mg/l
Normal value of STP microorganisms	2,4	mg/l
Normal value for the terrestrial compartment	212	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,2 mg/kg bw/d				
Inhalation				0,35 mg/m3				1,4 mg/kg
Skin				1,7 mg/kg bw/d				3,5 mg/kg bw/d

BENZYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	22	5	44	10	SKIN	11

Predicted no-effect concentration - PNEC		
Normal value in fresh water	1	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	5,27	mg/kg
Normal value for marine water sediment	0,527	mg/kg
Normal value for water, intermittent release	2,31	mg/l
Normal value of STP microorganisms	39	mg/l

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		20 mg/kg bw/d		4 mg/kg bw/d				
Inhalation		27 mg/m3		5,4 mg/m3		110 mg/m3		22 mg/m3
Skin		20 mg/kg bw/d		4 mg/kg bw/d				8 mg/kg bw/d

Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00263	mg/l
Normal value in marine water	0,000263	mg/l
Normal value for fresh water sediment	263,01	mg/kg
Normal value for marine water sediment	26,301	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,56 mg/kg/d				
Inhalation				0,97 mg/m3				3,9 mg/m3
Skin				0,56 mg/kg/d				1,1 mg/kg/d

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with all-oil fatty acids and triethylenetetramine

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00434	mg/l
Normal value in marine water	0,000434	mg/l
Normal value for fresh water sediment	434,02	mg/kg
Normal value for marine water sediment	43,4	mg/kg
Normal value for the terrestrial compartment	86,78	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				0,97 mg/kg				3,9 mg/kg
Skin				0,56 mg/kg/d				1,1 mg/kg/d

3,6-diazaoctane-1,8-diamine

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,19	mg/l
Normal value in marine water	0,038	mg/l

Normal value for fresh water sediment	95,9	mg/kg
Normal value for marine water sediment	19,2	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation						5380 mg/m3	1 mg/m3	
Skin							0,028 mg/cm2	0,57 mg/kg/d

QUARTZ

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		0,05			RESP
VLEP	FRA	0,1				RESP
VLEP	ITA	0,1				RESP
OEL	EU	0,1				RESP
TLV-ACGIH		0,025				RESP

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	49	10	98 (C)	20 (C)	SKIN	
MAK	DEU	49	10	98	20	SKIN	Hinweis
VLA	ESP	98	20	245	50	SKIN	
VLEP	FRA	49	10	246	50	SKIN	
VLEP	ITA	98	20	246	50	SKIN	
WEL	GBR	123	25	246	50	SKIN	
OEL	EU	98	20	246	50	SKIN	
TLV-ACGIH		97	20				

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	thixotropic liquid	
Colour	different colours	
Odour	aromatic	
Melting point / freezing point	not available	
Initial boiling point	0 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 65 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	soluble in organic solvents	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,46 (+-) 0,050	
Relative vapour density	not available	

Particle characteristics	not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2004/42/EC) :	11,48 % - 167,61 g/litre
VOC (volatile carbon)	8,92 % - 130,24 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F.Possibility of explosion.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

BENZYL ALCOHOL

May react dangerously with: hydrobromic acid,iron,oxidising agents,sulphuric acid.Risk of explosion on contact with: phosphorus trichloride.

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

May react dangerously with: strong oxidising agents,concentrated inorganic acids.

2-BUTOXYETHANOL

May react dangerously with: aluminium,oxidising agents.Forms peroxides with: air.

10.4. Conditions to avoid

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

BENZYL ALCOHOL

Avoid exposure to: air,sources of heat,naked flames.

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Avoid contact with: strong acids,strong oxidants.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

BENZYL ALCOHOL

Incompatible with: sulphuric acid,oxidising substances,aluminium.

10.6. Hazardous decomposition products

2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

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

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

Phenol, methylstyrenated

LD50 (Dermal):	> 2000 mg/kg ratto
LD50 (Oral):	> 2000 mg/kg ratto

BENZYL ALCOHOL

LD50 (Dermal):	2000 mg/kg Rabbit
LD50 (Oral):	1230 mg/kg Rat
LC50 (Inhalation vapours):	> 4,1 mg/l/4h Rat
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

LD50 (Oral):	1030 mg/kg

Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction

LD50 (Dermal):	> 2000 mg/kg
LD50 (Oral):	> 2000 mg/kg Ratto

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with all-oil fatty acids and triethylenetetramine

LD50 (Dermal):	> 2000 mg/kg Ratto
LD50 (Oral):	> 2000 mg/kg Ratto

SALICYLIC ACID

STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

3,6,9-triazaundecane-1,11-diamino

LD50 (Oral):	1600 mg/kg Ratto

3,6,9,12-tetraazatetradecane-1,14-diamine; pentaethylenehexamine

LD50 (Oral):	1600 mg/kg Ratto

3,6-diazaoctane-1,8-diamine

LD50 (Dermal):	1465 mg/kg Ratto
LD50 (Oral):	1716 mg/kg Ratto

2-BUTOXYETHANOL

LD50 (Oral):	1200 mg/kg Guinea pig
LC50 (Inhalation vapours):	3 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

12.1. Toxicity

Reaction product of Fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	
LC50 - for Fish	7,07 mg/l/96h Pesci
EC50 - for Crustacea	5,18 mg/l/48h Dafnie
EC50 - for Algae / Aquatic Plants	2,63 mg/l/72h Alghe
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with all-oil fatty acids and triethylenetetramine	
EC50 - for Algae / Aquatic Plants	1,25 mg/l/72h Alghe
3,6-diazaoctane-1,8-diamine	
LC50 - for Fish	330 mg/l/96h
EC50 - for Crustacea	31 mg/l/48h
EC50 - for Algae / Aquatic Plants	20 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	72 mg/l
3,6,9,12-tetraazatetradecane-1,14-diamine; pentaethylenehexamine	
LC50 - for Fish	180 mg/l/96h
EC50 - for Crustacea	17,5 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,7 mg/l/72h
Chronic NOEC for Crustacea	0,8 mg/l durata 336 h
3,6,9-triazaundecane-1,11-diamino	
LC50 - for Fish	420 mg/l/96h
EC50 - for Crustacea	24,1 mg/l/48h

EC50 - for Algae / Aquatic Plants	6,8 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	0,5 mg/l

12.2. Persistence and degradability

2-BUTOXYETHANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

BENZYL ALCOHOL

Rapidly degradable

3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE

Solubility in water	1000 - 10000 mg/l

NOT rapidly degradable

12.3. Bioaccumulative potential

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water	0,81

BENZYL ALCOHOL

Partition coefficient: n-octanol/water	1,1

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

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

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 3267

14.2. UN proper shipping name

ADR / RID:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Adduct of aliphatic polyamines; 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE)
IMDG:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Adduct of aliphatic polyamines; 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE)
IATA:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Adduct of aliphatic polyamines; 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE)

14.3. Transport hazard class(es)

ADR / RID:	Class: 8	Label: 8
IMDG:	Class: 8	Label: 8
IATA:	Class: 8	Label: 8

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 852
	Special provision:	A3, A803	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

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

Product

Point	3

Contained substance

Point	75

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

not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC) :

Two - pack performance coatings.

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%

- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
02 / 03 / 08 / 09 / 11 / 12 / 14 / 15 / 16.