

Safety Data Sheet

According to Regulation (EC) No. 2020/878 (REACH) Article 31, Annex II, as amended.

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

1.1. Product identifier

Product name **RAYRESIN – Part A (Resin)**
*(resin up to 0,25 lt)
Synonyms, Trade Names: RAYRESIN (two component single dose bags)
RAYCAST (straight or branch joint with two components epoxy resin)

Code UFI – Resin Part : YFUN-G3X8-9003-XCWX

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

Identified uses: For insulation of Low Voltage cable accessories. For mechanical protection of High Voltage cable accessories. Protection against moisture.
Uses advised against: None known

1.3. Details of the supplier of the safety data sheet

Name **RAYTECH S.r.l.**
Full address Via E. Fermi 11/13/17
District and Country 20019 Settimo M.se (MI) ITALY

tel. +39 02/33500147
fax +39 02/33500287
Email info@raytech.it

1.4. Emergency telephone number:

For urgent inquiries refer to:
GB
National Poisons Information Service (NPIS) Tel. 0344 892 0111 (United Kingdom), to healthcare professionals only;
Members of the Public: NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales)

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.

Resin

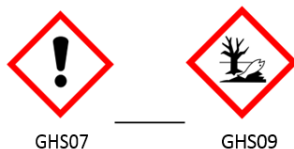
Hazard classification and indication:

Skin irritation 2	H315 Causes skin irritation
Eyes irritation 2	H319 Causes serious eye irritation.
Skin sensitivity 1	H317 May cause an allergic skin reaction
Chronic toxicity 2	H411 Toxic to aquatic life with long lasting effects

2.2. Label elements

Classification according to (CE) n° 1272/2008:

- Resin**



Signal word Hazard statements

Attention Skin irritation 2 Eyes irritation 2 Skin sensitivity 1 Chronic toxicity 2	H315 Causes skin irritation H319 Causes serious eye irritation. H317 May cause an allergic skin reaction H411 Toxic to aquatic life with long lasting effects
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Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before using.
P261: Avoid breathing dust/fume/ gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do. Continue rinsing.
P362: Take off contaminated clothing
P501: Dispose of contents/container in accordance with existing regulations.

Additional information.:

Contain oleaginous compounds
Code UFI – Resin Part : YFUN-G3X8-9003-XCWX

Health hazard:

H315 Causes skin irritation
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction
Please consult a doctor and show him this SDS.
H411 Toxic to aquatic life with long lasting effects
No particular risk for the environment on condition that the recommendations under section 13 are respected.

Ingestion hazard:

Environmental hazard for mixed preparation

2.3. Other hazards

Results of PBT and vPvB assessment: PBT: Product is not PBT.
vPvB: Product is not vPvB.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

General information: Description of the preparation:
Room curing epoxy resin. Resin and hardener are packed in a double bag (from 200 to 500 g).
Resin: epoxy –

N° CAS	N° EINECS	Denomination	%	Classification
				According to CE 1272/2008
25068-38-6	500-033-5 (NLP)	4, 4'-isopropylidenediphenol, oligomeric reaction with 1-chloro-2, 3 – epoxypropane	50-90%	Aquatic chronic toxicity 2, H411 Skin irritation. 2, H315 Skin sensitivity. 1, H317 Eyes irritation. 2, H319
68413-24-1	500-210-7 (NPL)	Oleaginous, oligomeric reaction product	10-25%	Eyes irritation. 2, H319 Skin sensitivity. 1, H317

SVHC Do not contain at level > 0,1% w/w, SVHC of the candidate list for authorization published by ECHA.
Full texts of H statements are detailed in point 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

General information: Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product. Call a physician if you experience symptoms. Keep contaminated clothing in closed containers until disposed of or decontaminated.

After inhalation : Remove to fresh air. Call a physician. Keep under medical observation at least for 48 hours.

After skin contact : Immediately wash skin with soap and plenty of water.

After eye contact : Wash immediately with plenty of water, during 15 minutes at least. Consult specialized medical personnel (Ophthalmologist).

After swallowing: Call a physician and phone immediately your local poison control centre or a medical Centre of your Country. Show him this SDS. Do not induce vomiting without the agreement of a doctor

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

No further relevant information available.

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

No further relevant information available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: CO2, extinguishing powder.

Unsuitable extinguishing media: -

5.2. Special hazards arising from the substance or mixture

Not classified flammable but can burnt. Carbon oxide production in case of incomplete combustion.
Harmful fumes
Do not inhale fumes

5.3. Advice for firefighters

Complete protective fire fighting clothing and self-contained breathing apparatus.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Cleaning methods

Avoid eye and skin contacts. Ensure adequate ventilation

6.2 Environmental Precautions:

Absorb with grainy products because the contaminated area could be slippery

6.3 Methods and material for containment and cleaning up:

Collect the product with absorbing materials such as wet sand or earth. Destroy the collected material according to the regulation. Prevent from entering sewers, drains or rivers.

6.4. Reference to other sections

Absorb the collected material with sand and earth. Dispose according to regulation in force.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling:

Wear protection gloves and glasses. Do not breath the vapours. Work in a well-ventilated area.

7.2 Conditions for safe storage:

Store in its original packaging, protected from the weather, avoiding humidity and at temperature above 0° and under 40 °C

7.3 Specific end use(s):

Please refer to our Product Instruction Sheet for guidance on process conditions.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Do not smoke, drink or eat during work. Wash your hand after work. If the area is exiguous make sure that it is well ventilated. This product does not contain significant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Breath protection

Wear glove and eye protection.

In case of vapours formation use a respirator with P2 filter.

In case of low or short-term exposure use a respirator filter; in case of intense or long-term exposure, use a breathing apparatus independent of the ambient air.

Hands Protection:



The glove material has to be impermeable and resistant to the substance / the preparation. Nitrile gloves complying with EN374 are recommended. The exact penetration time has to be determined by the manufacturer of the protective gloves and has to be observed.

Eyes Protection:



Tightly sealed safety glasses.

Body Protection:

Wear suitable protective clothing.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance :	Light yellow liquid
Odour :	Resin : sui generis
pH :	Resin: neutral
Relative density :	Resin = 1.13
Viscosity at 25 °C : Resin	circa 5000 mPa.s.
Boiling point/boiling range :	Not applicable.
Flash point :	Resin: 260 °C
Flammability :	Not applicable.
Explosive properties :	None to our knowledge.
Oxidising properties :	None to our knowledge.
Cloud temperature :	Not applicable.
Vapour pressure :	Not applicable.
Vapour density :	Not applicable.
Evaporation rate :	Not applicable.
Solubility :	alcohol, acetone, cetones: soluble Water : soluble
Partition coefficient(n-octanol/water) :	Not available.

9.2. Other information

No further relevant information available.

SECTION 10. Stability and reactivity

10.1. Reactivity	There are no particular risks of reaction with other substances in normal conditions of use.
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.
10.4. Conditions to avoid	If the product is used in common practices as described in the technical data sheet, no dangerous reaction will occur.
10.5. Incompatible materials	Strong Oxidising agents, Strong Alkali, Strong Bases, Amines.
10.6. Hazardous decomposition products	Product is stable at ambient temperature. Carbon monoxide & Carbon dioxide

SECTION 11. Toxicological information

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

Information on likely routes of exposure

Eye contact:	Harmful for the eyes
Skin Contact:	Harmful for the mucous membranes
Inhalation:	No data available for the preparation itself
Ingestion:	No data available for the preparation itself
Sensitization	Sensitization possible through skin contact.

Resin:

Data LD/LC50 relevant to that classification:
25068-38-6 4, 4'-isopropylidènediphénol, oligomeric reaction with
the 1-chloro- 2,3-epoxypropane
Oral route DL50 > 15000 mg/kg (rat)
Dermal route DL50 > 23000 mg/kg (rat)

**Additional toxicological
information:**

Classification according to the calculation method of the EU
classification guidelines for preparations as issued in the latest
version:
Irritant

SECTION 12. Ecological information

- 12.1. Ecotoxicity** Chronic toxicity to aquatic life:
25068-38-6 4, 4'-isopropylidènediphénol, oligomeric reaction with
the 1-chloro- 2,3-époxypropane
CE 50 h 48 1,8 mg/l (invertebrates)
CL 50 h 96 2 mg/l (freshwater fish) (FIS)
- 12.2. Persistence and degradability** Not degradable
- 12.3. Bioaccumulative potential** Not established.
- 12.4. Mobility in soil** Prevent from entering sewers, drains or rivers
- 12.5. Results of PBT and vPvB assessment** PBT: Product is not PBT. vPvB: Product is not vPvB.
- 12.6. Other adverse effects** Information not available

SECTION 13. Disposal considerations

- 13.1. Waste treatment methods** Non polymerised product: incineration under approved conditions
using incinerators. Waste disposal should be in accordance with
existing community national and local regulations
- Empty drums : Should be decontaminated
- Double bag (two component resin) Mix thoroughly the two components. The mixture polymerises giving
an inert polymer.
- REMARK : The mixture of hardener and resin is harmless after polymerisation.

SECTION 14. Transport information

Shipping according to the rules of the ADR (road), of the RID (railway), of the IMDG (by sea) and of
ICAO/IATA (by air).

Transport On the road/Rail (ADR / RID) N° UN : UN3082 (resin) - Environmental hazard
Class : 9 (resin)
Packaging classification: III
Tunnel restriction codes : 3 (E)

Transport by sea (IMDG)

N° UN : UN3082 (resin) - Environmental hazard
Class : 9 (resin)
Packaging classification: III

Transport by air (ICAO/IATA)

N° UN : UN3082 (resin) - Environmental hazard
Class : 9 (resin)
Packaging classification: III

Kemler index : 90

Low Quantity (LQ) : maximum quantity for package 1000 ml

N° EMS :F-A,S-F

(EmS Emergency Response Procedures for Ships Carrying Dangerous Goods
F-A =general fire schedule ;
S-F water soluble marine pollutant)

SECTION 15. Regulatory information

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

Labelling according to Regulation (EC) No. 1272/2008 . According to Commission Regulation(EU) 2015/830

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Substances on the candidate list (Art. 59 REACH):

according to the available data, the product does not contain SVHC substances in a percentage exceeding 0.1%.

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried

Table of occupational diseases: No. 51 concerning epoxy resins

SECTION 16. Other information

Review information: Not relevant (see header)

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

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

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CLP: Regulation (EC) 1272/2008
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IMDG: International Maritime Code for dangerous goods
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. 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)
 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)
- ECHA website

Disclaimer:

The data given here is based on current knowledge and experience. It should not be considered as guaranteeing specific properties. The users should be aware that there may be risks involved if the product is used for applications other than those specified. It does not dispense the users from knowing and applying regulations specific to their activity. Precautions connected to the product are under the responsibility of the user. This information should not be considered as exhaustive. It does not waive compliance to any other regulation concerning storage and use of the product for which the user is responsible.

Safety Data Sheet

According to Regulation (EC) No. 2020/878 (REACH) Article 31, Annex II, as amended.

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

1.1. Product identifier

Product name **RAYRESIN – Part B (Hardener)**
*(resin up to 0,25 lt)
Synonyms, Trade Names: **RAYRESIN** (two component single dose bags)
RAYCAST (straight or branch joint with two components epoxy resin)

Code UFI – Hardener Part : 3UHC-T0N4-F004-75UK

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

Identified uses: For insulation of Low Voltage cable accessories. For mechanical protection of High Voltage cable accessories. Protection against moisture.
Uses advised against: None known

1.3. Details of the supplier of the safety data sheet

Name **RAYTECH S.r.l.**
Full address Via E. Fermi 11/13/17
District and Country 20019 Settimo M.se (MI) ITALY

tel. +39 02/33500147
fax +39 02/33500287
Email info@raytech.it

1.4. Emergency telephone number:

For urgent inquiries refer to:
GB
National Poisons Information Service (NPIS) Tel. 0344 892 0111 (United Kingdom), to healthcare professionals only;
Members of the Public: NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales)

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.

Resin

Hazard classification and indication:

Acute toxicity 4	H302 Harmful if swallowed
Skin irritation 2	H315 Causes skin irritation
Skin sensitivity 1	H317 May cause an allergic skin reaction
Chronic Toxicity 2	H411 Toxic to aquatic life with long lasting effects
Eye damage 1	H318 Causes serious eye damage

Classification according to
(CE) n° 1272/2008:

• **Hardener**



GHS07



GHS05



GHS09

Signal word Hazard statements

Danger:

Acute toxicity 4	H302 Harmful if swallowed
Skin irritation 2	H315 Causes skin irritation
Skin sensitivity 1	H317 May cause an allergic skin reaction
Toxicity 2	H411 Toxic to aquatic life with long lasting effects
Eye damage 1	H318 Causes serious eye damage

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before using
P261: Avoid breathing dust/fume/ gas/mist/vapours/spray
P280: Wear protective gloves/protective clothing/eye protection/face protection
P303+ 361+ 353: IN CASE OF SKIN CONTACT take off immediately all contaminated.
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 control centre or doctor in case of malaise.
P501: Dispose of contents/container in accordance with existing regulations.

Additional information.:

Contain oleaginous compounds

Code UFI – Hardener Part : 3UHC-T0N4-F004-75UK

Health hazard:

H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage

Ingestion hazard:

Please consult a doctor and show him this SDS.

Environmental hazard for mixed preparation

H411 Toxic to aquatic life with long lasting effects
No particular risk for the environment on condition that the recommendations under section 13 are respected.

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Product is not PBT.

vPvB: Product is not vPvB.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

General information:

Room curing epoxy resin.
Resin and hardener are packed in a double bag (approx. 200 to 500 g).
Hardener: amines

Hardener:				
N° CAS	N° EINECS	Denomination	%	According to CE 1272/2008
68082-29-1 (NLP : 500-191-5)	500-191-5 (NLP)	Acids, fatty, unsaturated (C18), dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	25-50%	Skin sensitivity. 2, H315 Acute toxicity. 1, H317 Causes serious eye damage, H318 Aquatic Chronic. 2, H411
-	CE 700-991-6	Oleaginous, Decarboxylated, Distilled	25-50%	Acute toxicity 4, H302 Acute toxicity 4, H312 Skin irritation. 2 H315 Skin sensitivity. 1, H317 Causes serious eye damage, H318
90-72-2	202-013-9	2,4,6-tris (dimethylaminomethyl)phenol	10-25%	Acute toxicity 4, H302 Skin irritation. 2, H315 Eyes irritation . 2, H319
140-31-8	205-411-0	2-piperazin-1-ylethylamine	2,5-10%	Skin Corr. 1B, H314 Acute toxicity. 4, H302 Acute toxicity. 4, H312 Skin sensitivity. 1, H317 Chronic aquatic 3, H412

SVHC Do not contain at level > 0,1% w/w, svhc of the candidate list for authorization published by ECHA.

Full texts of H statements are detailed in point 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

General information:

Seek immediate medical advice.
Take affected persons out into the fresh air. Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation :

Remove to fresh air. Call a physician. Keep under medical observation at least for 48 hours.

After skin contact :

Immediately wash skin with soap and plenty of water.

After eye contact :

Wash immediately with plenty of water, during 15 minutes at least.
Consult specialized medical personnel (Ophthalmologist).

After swallowing:

Call a physician and phone immediately your local poison control centre or a medical Centre of your Country. Show him this SDS. Do not induce vomiting without the agreement of a doctor

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

No further relevant information available.

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

No further relevant information available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: CO₂, extinguishing powder.

Unsuitable extinguishing media: -

5.2. Special hazards arising from the substance or mixture

Not classified flammable but can burnt. Carbon oxide production in case of incomplete combustion.

Harmful fumes

Do not inhale fumes

5.3. Advice for firefighters

Complete protective fire fighting clothing and self-contained breathing apparatus.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid eye and skin contacts. Ensure adequate ventilation

Cleaning methods

Absorb with grainy products because the contaminated area could be slippery

6.2 Environmental Precautions:

Collect the product with absorbing materials such as wet sand or earth. Destroy the collected material according to the regulation. Prevent from entering sewers, drains or rivers.

6.3 Methods and material for containment and cleaning up:

Absorb the collected material with sand and earth. Dispose according to regulation in force.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling:

Wear protection gloves and glasses. Do not breath the vapours. Work in a well-ventilated area.

7.2 Conditions for safe storage:

Store in its original packaging, protected from the weather, avoiding humidity and at temperature above 0° and under 40 °C

7.3 Specific end use(s):

Please refer to our Product Instruction Sheet for guidance on process conditions.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Do not smoke, drink or eat during work. Wash your hand after work. If the area is exiguous make sure that it is well ventilated. This product does not contain significant quantities of materials with critical values that have to be monitored at the workplace.

8.2. Exposure controls

Wear glove and eye protection.

Breath protection

In case of vapours formation use a respirator with P2 filter. In case of low or short-term exposure use a respirator filter; in case of intense or long-term exposure, use a breathing apparatus independent of the ambient air.

Hands Protection:



The glove material has to be impermeable and resistant to the substance / the preparation. Nitrile gloves complying with EN374 are recommended. The exact penetration time has to be determined by the manufacturer of the protective gloves and has to be observed.

Eyes Protection:



Tightly sealed safety glasses.

Body Protection:

Wear suitable protective clothing.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance :	Light brown (Hardener) (Light yellow for Resin part) and liquid. Supplied in a double bag
Odour :	Amine-like
pH :	Circa 11 for a dispersion at 50%.
Relative density :	0.96
Viscosity at 25 °C : Resin	circa 5000 mPa.s.
Boiling point/boiling range :	Not applicable.
Flash point :	Hardener: 92 °C
Flammability :	Not applicable.
Explosive properties :	None to our knowledge.
Oxidising properties :	None to our knowledge.
Cloud temperature :	Not applicable.
Vapour pressure :	Not applicable.
Vapour density :	Not applicable.
Evaporation rate :	Not applicable.
Solubility :	alcohol, acetone, cetones: soluble Water : not soluble
Partition coefficient(n-octanol/water) :	Not available.

9.2. Other information

No further relevant information available.

SECTION 10. Stability and reactivity

10.1. Reactivity

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

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.

10.4. Conditions to avoid

If the product is used in common practices as described in the technical data sheet, no dangerous reaction will occur.

10.5. Incompatible materials

Strong Oxidising agents, Strong Alkali, Strong Bases, Amines.

- 10.6. Hazardous decomposition products** Product is stable at ambient temperature.
Carbon monoxide, Carbon dioxide & Nitrogen oxides.

SECTION 11. Toxicological information

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

Information on likely routes of exposure

Eye contact:	Harmful for the eyes
Skin Contact:	Harmful for the mucous membranes
Inhalation:	No data available for the preparation itself
Ingestion:	Swallowing will lead to a strong caustic effect on mouth and throat and risk of perforation of the esophagus and stomach
Sensitization	Sensitization possible through skin contact.

Hardener :

Data LD/LC50 relevant to that classification:		
140-31-8 2-pipérazin-1-yléthylamine		
Oral route	DL50	2140 mg/kg (rat)
Dermal route	DL50	880 mg/kg (rabbit)

90-72-2,4,6-tri (diméthylaminométhyl)phénol		
Oral route	DL50	1670 mg/kg (rat)
Dermal route	DL50	1400 mg/kg (rabbit)

Additional toxicological information:

Classification according to the calculation method of the EU classification guidelines for preparations as issued in the latest version:
Corrosive irritant
Swallowing will lead to a strong caustic effect on mouth and throat and risk of perforation of the esophagus and stomach.

SECTION 12. Ecological information

- 12.1. Ecotoxicity** No further relevant information available
- 12.2. Persistence and degradability** No further relevant information available
- 12.3. Bioaccumulative potential** Not established.
- 12.4. Mobility in soil** Prevent from entering sewers, drains or rivers
- 12.5. Results of PBT and vPvB assessment** PBT: Product is not PBT.
vPvB: Product is not vPvB.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

- 13.1. Waste treatment methods** Non polymerised product: incineration under approved conditions using incinerators. Waste disposal should be in accordance with existing community national and local regulations
- Empty drums : Should be decontaminated
- Double bag (two component resin) Mix thoroughly the two components. The mixture polymerises giving an inert polymer.
- REMARK : The mixture of hardener and resin is harmless after polymerisation.

SECTION 14. Transport information

Shipping according to the rules of the ADR (road), of the RID (railway), of the IMDG (by sea) and of ICAO/IATA (by air).

- Transport On the road/Rail (ADR / RID) N° UN : UN3082 (hardener) - Environmental hazard
Class : 9 (hardener)
Packaging classification: III
Tunnel Restriction code : 3 (E)
- Transport by sea (IMDG) N° UN : UN3082 (hardener) - Environmental hazard
Class : 9 (hardener)
Packaging classification: III
- Transport by air (ICAO/IATA) N° UN : UN3082 (hardener) - Environmental hazard
Class : 9 (hardener)
Packaging classification: III

Kemler index : 90
Low Quantity (LQ) : 5000 ml
Quantity (EQ): Code: E
Maximum quantity for package: 1000 ml

N° EMS :F-A,S-F

(EmS Emergency Response Procedures for Ships Carrying Dangerous Goods
F-A =general fire schedule ;
S-F water soluble marine pollutant)

SECTION 15. Regulatory information

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

Labelling according to Regulation (EC) No. 1272/2008 . According to Commisision Regulation(EU) 2015/830

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Substances on the candidate list (Art. 59 REACH):

according to the available data, the product does not contain SVHC substances in a percentage exceeding 0.1%.

15.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried

Table of occupational diseases: No. 49 concerning aliphatic amines

SECTION 16. Other information

Review information: Not relevant (see header)

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

H302 Harmful if swallowed

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H411 Toxic to aquatic life with long lasting effects

H318 Causes serious eye damage

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CLP: Regulation (EC) 1272/2008
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IMDG: International Maritime Code for dangerous goods
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. 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)
- 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)
- ECHA website

Disclaimer:

The data given here is based on current knowledge and experience. It should not be considered as guaranteeing specific properties. The users should be aware that there may be risks involved if the product is used for applications other than those specified. It does not dispense the users from knowing and applying regulations specific to their activity. Precautions connected to the product are under the responsibility of the user. This information should not be considered as exhaustive. It does not waive compliance to any other regulation concerning storage and use of the product for which the user is responsible.