

RESINE EPOXY TO 26 BICOMPOSANTE - DURCISSEUR - 5401100400D



SAFETY DATA SHEET
(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : RESINE EPOXY TO 26 BICOMPOSANTE - DURCISSEUR
Product code : 5401100400D.
UFI : 2UN0-A06P-E00G-WJSN

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

N/A

1.3. Details of the supplier of the safety data sheet

Registered company name : SOROMAP PEINTURES VERNIS.
Address : 1, RUE MAURICE MALLET Z.I. DE BELIGON.17300.ROCHEFORT SUR MER.FRANCE.
Telephone : 05.46.88.36.10. Fax : 05.46.88.36.15.
contact@soromap.com
www.soromap.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).
Acute dermal toxicity, Category 4 (Acute Tox. 4, H312).
Skin irritation, Category 2 (Skin Irrit. 2, H315).
Serious eye damage, Category 1 (Eye Dam. 1, H318).
Respiratory sensitisation, Category 1 (Resp. Sens. 1, H334).
Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS07



GHS08



GHS09

Signal Word :

DANGER

Product identifiers :

EC 500-105-6 PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA
EC 203-808-3 PIPERAZINE
EC 205-411-0 2-PIPERAZIN-1-YLETHYLAMINE

Hazard statements :

H302 + H312	Harmful if swallowed or in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements - General :

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Precautionary statements - Prevention :

P280	Wear protective gloves/protective clothing/eye protection/face protection.
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Precautionary statements - Response :

P302 + P352	IF ON SKIN: Wash with plenty of water/...
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary statements - Disposal :

P501	Dispose of contents/container by approved organization
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2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 39423-51-3 EC: 500-105-6 REACH: 01-2119556886-20 PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Eye Dam. 1, H318 Aquatic Chronic 2, H411		50 \leq x % < 100
CAS: 102-71-6 EC: 203-049-8 NITRILOTRIETHANOL		[1]	2.5 \leq x % < 10
CAS: 110-85-0 EC: 203-808-3 PIPERAZINE	GHS08, GHS05 Dgr Skin Corr. 1B, H314 Skin Sens. 1, H317 Resp. Sens. 1, H334 Repr. 2, H361fd	[1] [2]	1 \leq x % < 2.5
CAS: 7631-86-9 EC: 231-545-4 REACH: 01-2119379499-16-0000 SILICA		[1]	1 \leq x % < 2.5

CAS: 140-31-8 EC: 205-411-0 2-PIPERAZIN-1-YLETHYLAMINE	GHS06, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412		0.1 ≤ x % < 1
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Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 39423-51-3 EC: 500-105-6 REACH: 01-2119556886-20 PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA		oral: ATE = 550 mg/kg BW
CAS: 102-71-6 EC: 203-049-8 NITRILOTRIETHANOL		oral: ATE = 6400 mg/kg BW
CAS: 110-85-0 EC: 203-808-3 PIPERAZINE	Skin Corr. 1B: H314 C≥ 5% Skin Corr. 1C: H314 0% ≤ C < 5% Skin Irrit. 2: H315 1% ≤ C < 0%	dermal: ATE = 8300 mg/kg BW oral: ATE = 2600 mg/kg BW
CAS: 7631-86-9 EC: 231-545-4 REACH: 01-2119379499-16-0000 SILICA		inhalation: ATE = 0.139 mg/l (dust/mist)
CAS: 140-31-8 EC: 205-411-0 2-PIPERAZIN-1-YLETHYLAMINE	Skin Corr. 1B: H314 C≥ 5% Skin Corr. 1C: H314 0% ≤ C < 5% Skin Irrit. 2: H315 1% ≤ C < 0%	dermal: ATE = 866 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures**In the event of exposure by inhalation :**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of an allergic reaction, seek medical attention.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media**Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of asthma, allergies and/or chronic or periodical breathing difficulties should not, under any circumstances, use these mixtures.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m ³ :	VME-ppm :	VLE-mg/m ³ :	VLE-ppm :	Notes :
110-85-0	0.1	-	0.3	-	-

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME :	VME :	Excess	Notes
102-71-6		2 E ppm 4 (II) mg/m ³		1 (I)
110-85-0		0.1 mg/m ³		1(I)
7631-86-9		4E mg/m ³		

- France (INRS - ED984 / 2020-1546) :

CAS	VME-ppm :	VME-mg/m ³ :	VLE-ppm :	VLE-mg/m ³ :	Notes :	TMP No :
110-85-0	-	0.1	-	0.3	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
110-85-0	0.1 mg/m ³	0.3 mg/m ³		Sen	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Short term systemic effects.
20 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Short term local effects.
0.04 mg of substance/cm²

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
3.3 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term local effects.
0.006 mg of substance/cm²

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
3.6 mg of substance/m³

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term systemic effects.
21.4 mg of substance/m³

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Short term systemic effects.
1.5 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Ingestion.
Long term systemic effects.
0.3 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Short term systemic effects.
10 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Short term local effects.
0.02 mg of substance/cm²

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
1.7 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term local effects.
0.003 mg of substance/cm²

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term systemic effects.
5.3 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
0.9 mg of substance/m3

PIPERAZINE (CAS: 110-85-0)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Short term systemic effects.
0.042 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
0.014 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term systemic effects.
0.3 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term local effects.
0.3 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
0.1 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
0.1 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
1.5 mg/kg body weight/day

NITRILOTRIETHANOL (CAS: 102-71-6)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
6.3 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
5 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
5 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
13 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
3.1 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
1.25 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
1.25 mg of substance/m3

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
1.6 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
14 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Dermal contact.
Long term systemic effects.
0.8 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
3.48 mg of substance/m3

Predicted no effect concentration (PNEC):

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Environmental compartment:
PNEC : Soil.
42.9 mg/kg

Environmental compartment:
PNEC : Fresh water.
0.058 mg/l

Environmental compartment:
PNEC : Sea water.
0.0058 mg/l

Environmental compartment:
PNEC : Intermittent waste water.
0.58 mg/l

Environmental compartment:
PNEC : Fresh water sediment.
215 mg/kg

Environmental compartment:
Marine sediment.

PNEC :	21.5 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 250 mg/l
PIPERAZINE (CAS: 110-85-0)	
Environmental compartment: PNEC :	Soil. 11.5 mg/kg
Environmental compartment: PNEC :	Fresh water. 1.25 mg/l
Environmental compartment: PNEC :	Sea water. 0.125 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 1.25 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 4.5 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.45 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 54 mg/l
NITRILOTRIETHANOL (CAS: 102-71-6)	
Environmental compartment: PNEC :	Soil. 0.151 mg/kg
Environmental compartment: PNEC :	Fresh water. 0.32 mg/l
Environmental compartment: PNEC :	Sea water. 0.032 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 5.12 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 1.7 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.17 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 10 mg/l
PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)	
Environmental compartment: PNEC :	Soil. 0.002 mg/kg
Environmental compartment: PNEC :	Fresh water. 0.0044 mg/l

Environmental compartment: PNEC :	Sea water. 0.00044 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 0.044 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 0.02 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.002 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 10 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Viscous liquid.

Colour

Unspecified

Odour

Odour threshold : Not stated.

Melting point

Melting point/melting range : Not specified.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not specified.

Flammability

Flammability (solid, gas) : Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not specified.

Decomposition temperature

Decomposition point/decomposition range : Not specified.

pH

pH : Not stated.
Slightly basic.

pH (aqueous solution) : Not stated.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Partially soluble.

Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

Density and/or relative density

Density : 0.99

Relative vapour density

Vapour density : Not stated.

9.2. Other information

VOC (g/l) : 1.56

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Harmful if swallowed.

Harmful in contact with skin.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

May cause hypersensitivity of the respiratory tracts with effects taking the form of asthma, rhinitis/conjunctivitis or alveolitis.

May cause an allergic reaction by skin contact.

11.1.1. Substances**Acute toxicity :**

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Species : Rabbit

Dermal route :

LD50 = 866 mg/kg

Species : Rabbit

SILICA (CAS: 7631-86-9)

Oral route :

LD50 > 5000 mg/kg

Species : Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 5000 mg/kg

Species : Rabbit

Inhalation route (Dusts/mist) :

LC50 = 0.139 mg/l

Species : Rat

PIPERAZINE (CAS: 110-85-0)

Oral route :

LD50 = 2600 mg/kg

Species : Rat

Dermal route : LD50 = 8300 mg/kg
Species : Rabbit

NITRILOTRIETHANOL (CAS: 102-71-6)

Oral route : LD50 = 6400 mg/kg
Species : Rat

Dermal route : LD50 > 2000 mg/kg
Species : Rabbit

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Oral route : LD50 = 550 mg/kg
Species : Rat

Dermal route : LD50 > 1000 mg/kg
Species : Rat

Skin corrosion/skin irritation :**NITRILOTRIETHANOL (CAS: 102-71-6)**

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Corrosivity : Causes severe skin burns.

PIPERAZINE (CAS: 110-85-0)

Corrosivity : Causes severe skin burns.
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation :**NITRILOTRIETHANOL (CAS: 102-71-6)**

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitisation :**NITRILOTRIETHANOL (CAS: 102-71-6)**

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
OECD Guideline 406 (Skin Sensitisation)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.

Germ cell mutagenicity :**2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)**

No mutagenic effect.

SILICA (CAS: 7631-86-9)

No mutagenic effect.

PIPERAZINE (CAS: 110-85-0)

No mutagenic effect.

OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

NITRILOTRIETHANOL (CAS: 102-71-6)

No mutagenic effect.

Species : Bacteria

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

No mutagenic effect.

Mutagenesis (in vivo) :

Negative.

Species : Others

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro) :

Negative.

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :

Negative.

Carcinogenicity :

SILICA (CAS: 7631-86-9)

Carcinogenicity Test :

Negative.

No carcinogenic effect.

NITRILOTRIETHANOL (CAS: 102-71-6)

Carcinogenicity Test :

Negative.

No carcinogenic effect.

Species : Rat

OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicant :

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Study on development :

Species : Rat

OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

NITRILOTRIETHANOL (CAS: 102-71-6)

No toxic effect for reproduction

Study on fertility :

Species : Rat

OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Study on development :

Species : Rat

OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Study on development :

Species : Rat

OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

Specific target organ systemic toxicity - repeated exposure :

NITRILOTRIETHANOL (CAS: 102-71-6)

Oral route :

C > 1000 mg/kg bodyweight/jour

Duration of exposure : 90 days

Dermal route :

OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

C > 200 mg/kg body weight/day

Duration of exposure : 90 days

Duration of exposure : 90 days

OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)

11.1.2. Mixture**Respiratory or skin sensitisation :**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

11.2. Information on other hazards**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 7631-86-9 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 102-71-6 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity**12.1.1. Substances**

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Fish toxicity :

LC50 = 2190 mg/l

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 58 mg/l

Species : *Daphnia magna*

Duration of exposure : 48 h

Algae toxicity :

ECr50 > 1000 mg/l

Duration of exposure : 72 h

SILICA (CAS: 7631-86-9)

Fish toxicity :

LC50 > 10000 mg/l

Species : *Brachydanio rerio*

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 > 1000 mg/l

Species : *Daphnia magna*

Duration of exposure : 24 h

OECD Guideline 202 (*Daphnia* sp. Acute Immobilisation Test)

PIPERAZINE (CAS: 110-85-0)

Fish toxicity :

LC50 > 1800 mg/l

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 21 mg/l

Duration of exposure : 48 h

NOEC = 12.5 mg/l

Species : *Daphnia magna*

	Duration of exposure : 21 days
Algae toxicity :	ECr50 > 1000 mg/l Duration of exposure : 72 h
	NOEC > 1000 mg/l Duration of exposure : 72 h
NITRILOTRIETHANOL (CAS: 102-71-6)	
Fish toxicity :	LC50 = 11800 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 609.88 mg/l Duration of exposure : 48 h
PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)	
Fish toxicity :	LC50 > 100 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 13 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 = 4.4 mg/l Species : Selenastrum capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC = 1 mg/l Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability**12.2.1. Substances**

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Biodegradability : Non-rapidly degradable.

PIPERAZINE (CAS: 110-85-0)

Biodegradability : Rapidly degradable.

NITRILOTRIETHANOL (CAS: 102-71-6)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Biodegradability : Non-rapidly degradable.

12.3. Bioaccumulative potential**12.3.1. Substances**

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

Octanol/water partition coefficient : log K_{ow} = -1.48

PIPERAZINE (CAS: 110-85-0)

Octanol/water partition coefficient : log K_{ow} = -1.24

NITRILOTRIETHANOL (CAS: 102-71-6)

Octanol/water partition coefficient : log K_{ow} = -2.3

Bioaccumulation : BCF < 3.9

PROPYLIDYNETRIMETHANOL, PROPOXYLATED, REACTION PRODUCTS WITH AMMONIA (CAS: 39423-51-3)

Octanol/water partition coefficient : log K_{ow} = -1.13

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 - ICAO/IATA 2021).

14.1. UN number or ID number

3082

14.2. UN proper shipping name

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(propylidynetrimethanol, propoxylated, reaction products with ammonia)

14.3. Transport hazard class(es)

- Classification :



9

14.4. Packing group

III

14.5. Environmental hazards

- Environmentally hazardous material :

**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 375 601	E1	3	-

Not subject to this regulation if Q ≤ 5 l / 5 kg (ADR 3.3.1 - DS 375)

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	9	-	III	5 L	F-A. S-F	274 335 969	E1	Category A	-

Not subject to this regulation if Q ≤ 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158 A197 A215	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197 A215	E1

Not subject to this regulation if Q ≤ 5 l / 5 kg (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : Hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
CMR: Carcinogenic, mutagenic or reprotoxic.
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefährdungsklasse (Water Hazard Class).
GHS05 : Corrosion
GHS07 : Exclamation mark
GHS08 : Health hazard
GHS09 : Environment
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.