



## SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

#### 1.1. Product identifier

Product name : SZ 8525  
Product code : 1253.  
Hardener for epoxy resin  
UFI : 5PS5-G0P3-W006-NGNK

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

Recommended use: Hardener for epoxy resin  
Uses advised against : data not available

#### 1.3. Details of the supplier of the safety data sheet

Registered company name : SICOMIN Composites.  
Address : 31 avenue de la Lardiere - BP 23.13161.Chateauneuf les Martigues.France.  
Telephone : +33 (0)4 42 42 30 20. Fax : +33 (0)4 42 81 29 29.  
e-mail: composites@sicomin.com  
Site web : <http://www.sicomin.com>  
AUSTRALIAN Importer : Lavender CE Pty Ltd - 108 Westgate Street - Wacol, Qld, 4076 AUSTRALIA / M: 0409 892 032 / Ph: +61 7 3255 6924 /  
Fax: +61 7 3255 6923 / Web: [www.lavender-ce.com](http://www.lavender-ce.com) / Email: [sheading@lavender-ce.com](mailto:sheading@lavender-ce.com)

#### 1.4. Emergency telephone number : .

Association/Organisation : INRS / ORFILA tél: +33(0)1.45.42.59.59 - (FRANCE) .

#### Other emergency numbers

Health and Safety Executive (HSE) Chemicals Regulation Directorate - Telephone: +44 151 951 3317 - USA : +1/ 800/ 424.9300 -  
AUSTRALIA : Emergency Poison Advice : 131 126

### 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 corrosion, Category 1B (Skin Corr. 1B, H314).  
Serious eye damage, Category 1 (Eye Dam. 1, H318).  
Skin sensitisation, Category 1 (Skin Sens. 1, H317).  
Reproductive toxicity, Category 2 (Repr. 2, H361fd).  
Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).  
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).  
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

Signal Word :

DANGER

Product identifiers :

EC 220-666-8

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE

EC 202-013-9	2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL
EC 205-411-0	2-PIPERAZIN-1-YLETHYLAMINE
Hazard statements :	
H302 + H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure (if inhaled).
H412	Harmful to aquatic life with long lasting effects.
Precautionary statements - Prevention :	
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/
...	
Precautionary statements - Response :	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/...
P362 + P364	Take off contaminated clothing and wash it before reuse.

**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.

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

Identification	(EC) 1272/2008	Note	%
CAS: 2855-13-2 EC: 220-666-8 REACH: 01-2119514687-32-XXXX 3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Chronic 3, H412		50 $\leq$ x % < 100
CAS: 90-72-2 EC: 202-013-9 REACH: 01-2119560597-27-XXXX 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	GHS05, GHS07 Dgr Skin Corr. 1B, H314 Skin Sens. 1B, H317 Aquatic Chronic 3, H412		10 $\leq$ x % < 25
CAS: 140-31-8 EC: 205-411-0 REACH: 01-2119471486-30-XXXX 2-PIPERAZIN-1-YLETHYLAMINE	GHS08, GHS06, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Repr. 2, H361fd STOT RE 1, H372 Aquatic Chronic 3, H412	[2]	2.5 $\leq$ x % < 10

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

**Information on ingredients :**

[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 the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

Never give anything by mouth. If unconscious and breathing, place in recovery position and call an ambulance.

#### 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.

Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

#### 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

#### Information for the doctor :

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

Contact a specialist for treatment poisoning if large quantities have been ingested or inhaled.

## 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
- powder
- carbon dioxide (CO<sub>2</sub>)

#### 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 (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

### 5.3. Advice for firefighters

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

Wear conform with the European standard EN 469.

## 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 spilled, 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.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

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 skin sensitisation should not, under any circumstance, handle this mixture.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

**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.

Do not inhale vapours.

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 exposure - obtain special instructions before use.

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

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

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

**Packaging**

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

**7.3. Specific end use(s)**

Scope advised: Stratification

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

No data available.

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

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

**Final use:**

**Workers.**

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 3.33 mg/kg de poids corporel/jour

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 10.6 mg de substance/m3

Exposure method: Inhalation.  
Potential health effects: Short term systemic effects.  
DNEL : 10.6 mg de substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 0.015 mg de substance/m3

Exposure method: Inhalation.  
Potential health effects: Short term local effects.  
DNEL : 80 mg de substance/m3

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

**Final use:** **Workers.**

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 0.2 mg/kg de poids corporel/jour

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 0.00031 mg de substance/l

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)

**Final use:** **Workers.**

Exposure method: Inhalation.  
Potential health effects: Short term systemic effects.  
DNEL : 20.1 mg de substance/m3

Exposure method: Inhalation.  
Potential health effects: Short term local effects.  
DNEL : 20.1 mg de substance/m3

**Final use:** **Man exposed via the environment.**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 0.526 mg/kg de poids corporel/jour

**Predicted no effect concentration (PNEC):**

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

Environmental compartment: Soil.  
PNEC : 42.9 mg/kg

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

Environmental compartment: Sea water.  
PNEC : 0.006 mg/l

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

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

Environmental compartment: Marine sediment.

PNEC :	21.51 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	250 mg/l
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)	
Environmental compartment:	Fresh water.
PNEC :	0.084 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0084 mg/l
3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)	
Environmental compartment:	Soil.
PNEC :	1.121 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.06 mg/l
Environmental compartment:	Sea water.
PNEC :	0.006 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.23 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	5.784 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.578 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	3.18 mg/l

## 8.2. Exposure controls

Use only with adequate ventilation or provided with ventilation at the source.

### 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 EN374.

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 :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

#### - Body protection

Avoid skin contact.

Wear suitable protective clothing.

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

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

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

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 breathing vapours.

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 :

Attention! If the protection group is insufficient.

Mask with filter type A, B, E, K, P

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

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

#### General information :

Physical state :	Fluid liquid.
Color:	colorless to pale yellow

#### Important health, safety and environmental information

pH :	Not stated.
	Slightly basic.
Boiling point/boiling range :	Not relevant.
Flash Point Interval :	FP > 100°C.
Vapour pressure (50°C) :	Not relevant.
Density :	0.94 ± 0.02 @ 20°C
Water solubility :	Soluble.
Viscosity :	20 ± 5 mPa.s @ 25°C
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.
Index of refraction :	1.4910 ± 0.002 @ 25 °C
% VOC :	0

### 9.2. Other information

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

Avoid :

- contact with air

### 10.5. Incompatible materials

Keep away from :

- strong oxidising agents

### 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO<sub>2</sub>)
- nitrogen oxide (NO)
- nitrogen dioxide (NO<sub>2</sub>)

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Harmful if swallowed.

Harmful in contact with skin.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

May cause an allergic reaction by skin contact.

Suspected human reproductive toxicant.

Suspected of damaging fertility and the unborn child.

May cause severe damage to organs in the event of repeated or prolonged exposure.

#### 11.1.1. Substances

##### Acute toxicity :

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

Oral route : LD50 = 2097 mg/kg  
Species : Rabbit

Dermal route : LD50 = 866 mg/kg  
Species : Rabbit

Inhalation route (n/a) : LC50 > 5 mg/l

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

Oral route : LD50 = 2169 mg/kg  
Species : Rat

Dermal route : LD50 > 808 mg/kg  
Species : Rabbit

Inhalation route (n/a) : LC50 0.5

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)

Oral route : LD50 = 1030 mg/kg  
Species : Rat

Dermal route : LD50 > 2000 mg/kg  
Species : Rat  
OCDE Ligne directrice 402 (Toxicité aiguë par voie cutanée)

Inhalation route (n/a) : LC50 > 5.01 mg/l  
Species : Rat  
OCDE Ligne directrice 403 (Toxicité aiguë par inhalation)

##### Respiratory or skin sensitisation :

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)

Species : Rabbit  
OCDE Ligne directrice 406 (Sensibilisation de la peau)

##### Germ cell mutagenicity :

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

No mutagenic effect.

Mutagenesis (in vivo) : Negative.

OCDE Ligne directrice 471 (Essai de mutation réverse sur des bactéries)



Ames test (in vitro) : Negative.  
With or without metabolic activation.

**Reproductive toxicant :**

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

Study on development :

Species : Rat

OCDE Ligne directrice 422 (Étude combinée de toxicité à doses répétées et de dépistage de la toxicité pour la reproduction et le développement)

**Specific target organ systemic toxicity - repeated exposure :**

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

Species : Rat

OCDE Ligne directrice 413 (Toxicité subchronique par inhalation : 90 jours)

**11.1.2. Mixture****Acute toxicity :**

Oral route : Harmful if swallowed.  
LD50 = 1184 mg/kg

Dermal route : Harmful in contact with skin.  
LD50 = 1365 mg/kg

**SECTION 12 : ECOLOGICAL INFORMATION**

Harmful 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**

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

Fish toxicity :

LC50 = 222 mg/l

Species : *Oncorhynchus mykiss*

Duration of exposure : 24 h

Crustacean toxicity :

EC50 = 718 mg/l

Species : *Palaemonetes pugio*

Duration of exposure : 96 h

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)

Fish toxicity :

LC50 = 110 mg/l

Species : *Leuciscus idus*

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 23 mg/l

Species : *Daphnia magna*

Duration of exposure : 48 h

OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

NOEC = 3 mg/l

Species : *Daphnia magna*

Duration of exposure : 21 jours

OCDE Ligne directrice 202 (*Daphnia* sp., essai d'immobilisation immédiate)

Algae toxicity :

ECr50 &gt; 50 mg/l

Species : *Desmodesmus subspicatus*

Duration of exposure : 72 h

NOEC = 1.5 mg/l

Species : *Desmodesmus subspicatus*

Duration of exposure : 72 h

Autres lignes directrices

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 OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)
Algae toxicity :	ECr50 > 1000 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

### 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

## 12.2. Persistence and degradability

### 12.2.1. Substances

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)  
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)  
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)  
Chemical oxygen demand : DCO = 560 mg/l  
Five-day biochemical oxygen demand : DBO5 = 5 mg/l  
Biodegradability : Non-rapidly degradable.  
DBO5/DCO = 0.01

## 12.3. Bioaccumulative potential

### 12.3.1. Substances

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)  
Octanol/water partition coefficient : log K<sub>ow</sub> = -1.48

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)  
Octanol/water partition coefficient : log K<sub>ow</sub> = 0.219

3-AMINOMETHYL-3,5,5-TRIMETHYL-CYCLOHEXYLAMINE (CAS: 2855-13-2)  
Octanol/water partition coefficient : log K<sub>ow</sub> = 0.99  
OCDE Ligne directrice 107 (Coefficient de partage (n-octanol/eau): méthode par agitation en flacon)

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

No data available.

## 12.6. 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.

**Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :**

07 01 08 \* other still bottoms and reaction residues

**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 2019 - IMDG 2018 - ICAO/IATA 2020).

**14.1. UN number**

2735

**14.2. UN proper shipping name**

UN2735=AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(3-aminomethyl-3,5,5-trimethyl-cyclohexylamine, 2,4,6-tris(dimethylaminomethyl)phenol)

**14.3. Transport hazard class(es)**

- Classification :



8

**14.4. Packing group**

III

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C7	III	8	80	5 L	274	E1	3	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation	
	8	-	III	5 L	F-A, S-B	223 274	E1	Category A	SGG18 SG35	
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	8	-	III	852	5 L	856	60 L	A3 A803	E1	
	8	-	III	Y841	1 L	-	-	A3 A803	E1	

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. Transport in bulk according to Annex II of Marpol and the IBC Code**

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. 2020/217 (ATP 14)

**- Container information:**

No data available.

**- Particular provisions :**

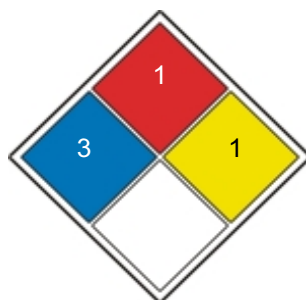
No data available.

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

WGK 2 : Hazardous for water.

**- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :**

NFPA 704, Labelling: Health=3 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



**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.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure .
H412	Harmful to aquatic life with long lasting effects.

**Abbreviations :**

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique Formula Identifier

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

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.