

Safety Data Sheet

KERAPOXY PART A

Safety Data Sheet dated: 7/20/2015 - version 2

Date of first edition: 5/13/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: KERAPOXY PART A

Recommended use of the chemical and restrictions on use

Recommended use: Epoxy mortar and grout

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Classification of the chemical

| | |
|-------------------|--|
| Skin Irrit. 2 | Causes skin irritation. |
| Eye Irrit. 2A | Causes serious eye irritation. |
| Skin Sens. 1 | May cause an allergic skin reaction. |
| Aquatic Chronic 3 | Harmful to aquatic life with long lasting effects. |

Label elements

Symbols:



Warning

| Code | Description |
|----------------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Code | Description |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260.1 | Do not breathe mist/vapours/spray. |
| P264.2 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280.1 | Wear protective gloves and eye protection. |
| P302+P352.A | 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. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |

| | |
|-----------|--|
| P314 | Get medical advice/attention if you feel unwell. |
| P321.A | Specific treatment (see supplementary instructions on this label) |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |
| P501.A | Dispose of contents/container in accordance with applicable regulations. |

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a dust hazard)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

| Quantity | Name | Ident. Numb. | Classification |
|----------|---|--|--|
| 70-80 % | Silica Sand | CAS:14808-60-7 | Carc. 1A, H350.A; STOT RE 1, H372.A |
| 10-20 % | Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700) | CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8 | Eye Irrit. 2A, H319; Skin Irrit. 2, H315; Skin Sens. 1, H317 |
| 5-10 % | Titanium dioxide | CAS:13463-67-7 | Carc. 2, H351 |
| 5-10 % | Alkyl epoxy resin | CAS:68609-97-2 | Skin Irrit. 2, H315; Skin Sens. 1, H317 |
| 1-5 % | Phenol, polymer with formaldehyde, glycidyl ether; molecular weight <= 700 | CAS:28064-14-4 | Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411 |
| 1-5 % | Dimethyl silicone polymer with silica | CAS:67762-90-7 | Skin Irrit. 2, H315; Eye Irrit. 2B, H320 |

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:
Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

| Component | OEL Type | Country | Ceiling | Long Term mg/m ³ | Long Term ppm | Short Term mg/m ³ | Short Term ppm | Behaviour | Note |
|------------------|----------|---------|---------|-----------------------------|---------------|------------------------------|----------------|-----------|---|
| Silica Sand | ACGIH | | | 0,025 | | | | | A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis; |
| Titanium dioxide | OSHA | | | 15 | | | | | A4 - Not Classifiable as a Human Carcinogen;lower respiratory tract irritation; |
| | ACGIH | | | 10 | | | | | |

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: Paste white
Odour: Latex like
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: >100 °C (212 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: N.A.
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

| | | |
|---|-------------------|--|
| Silica Sand | a) acute toxicity | LD50 Oral Rat = 500mg/kg |
| Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700) | a) acute toxicity | LD50 Oral Rat 11400mg/kg |
| Titanium dioxide | a) acute toxicity | LD50 Oral Rat > 10000mg/kg |
| Phenol, polymer with formaldehyde, glycidyl ether; molecular weight <= 700 | a) acute toxicity | LD50 Skin Rabbit > 5000,00000mg/kg LD50 Oral Rat > 11400,00000mg/kg |

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

| | |
|------------------|----------|
| Silica Sand | Group 1 |
| Titanium dioxide | Group 2B |

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand
Titanium dioxide

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand
Titanium dioxide

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

| Quantity | Component | Ident. Numb. | Ecotox Infos |
|----------|-------------|-----------------|--|
| 70-80 % | Silica Sand | CAS: 14808-60-7 | LC50 a) Aquatic acute toxicity carp> 10000,00000mg/L 72h |

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

UN number

ADR-UN number: N.A.
DOT-UN Number: N.A.
IATA-Un number: N.A.
IMDG-Un number: N.A.

UN proper shipping name

ADR-Shipping Name: N.A.
DOT-Proper Shipping Name: N.A.
IATA-Technical name: N.A.
IMDG-Technical name: N.A.

Transport hazard class(es)

ADR-Class: N.A.
 DOT-Hazard Class: N.A.
 IATA-Class: N.A.
 IMDG-Class: N.A.

Packing group

ADR-Packing Group: N.A.
 DOT-Packing group: N.A.
 IATA-Packing group: N.A.
 IMDG-Packing group: N.A.

Environmental hazards

Marine pollutant: No
 Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):
 N.A.
 Road and Rail (ADR-RID):
 N.A.
 Air (IATA):
 N.A.
 Sea (IMDG):
 N.A.

15. REGULATORY INFORMATION**USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

| | | |
|---|-------------------|-------------------------------|
| Silica Sand | is listed in TSCA | Section 8b |
| Reaction product: Bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700) | is listed in TSCA | Section 8b |
| Titanium dioxide | is listed in TSCA | Section 8b |
| Alkyl epoxy resin | is listed in TSCA | Section 8b |
| Phenol, polymer with formaldehyde, glycidyl ether; molecular weight <= 700 | is listed in TSCA | Section 8b |
| Dimethyl silicone polymer with silica | is listed in TSCA | Section 8b, Section 8a - PAIR |

SARA - Superfund Amendments and Reauthorization Act**Section 302 - Extremely Hazardous Substances:**

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**Substance(s) listed under CERCLA:**

no substances listed

CAA - Clean Air Act**CAA listed substances:**

no substances listed

CWA - Clean Water Act**CWA listed substances:**

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

| | |
|------------------|----------------------|
| Silica Sand | Listed as carcinogen |
| Titanium dioxide | Listed as carcinogen |

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

| |
|------------------|
| Silica Sand |
| Titanium dioxide |

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

| |
|------------------|
| Silica Sand |
| Titanium dioxide |

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

| |
|------------------|
| Silica Sand |
| Titanium dioxide |

16. OTHER INFORMATION

| Code | Description |
|--------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H320 | Causes eye irritation |
| H350.A | May cause cancer if inhaled. |
| H351 | Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>. |
| H372.A | Causes damage to organs through prolonged or repeated exposure if inhaled. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Safety Data Sheet dated: 7/20/2015 - version 2

Product code: 1851

Additional classification information



HMIS Health: 2 = Moderate

HMIS Health - Is health hazard chronic?: Yes

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 2 = Moderate

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 14. TRANSPORT INFORMATION
- 16. OTHER INFORMATION

Safety Data Sheet

KERAPOXY PART B

Safety Data Sheet dated: 5/13/2015 - version 1

Date of first edition: 5/13/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: KERAPOXY PART B

Recommended use of the chemical and restrictions on use

Recommended use: Epoxy mortar and grout

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Classification of the chemical

Skin Corr. 1B Causes severe skin burns and eye damage.

Eye Dam. 1 Causes serious eye damage.

Skin Sens. 1 May cause an allergic skin reaction.

Label elements

Symbols:



Danger

Code Description

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Code Description

P260.1 Do not breathe mist/vapours/spray.

P264.2 Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280.1 Wear protective gloves and eye protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353.1 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.A Immediately call a POISON CENTER.

P321.A Specific treatment (see supplementary instructions on this label)

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

| Quantity | Name | Ident. Numb. | Classification |
|----------|--|----------------|--|
| 70-80 % | Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine, epichlorohydrin and tetraethylenepentamine | CAS:68951-85-9 | Skin Irrit. 2, H315; Eye Irrit. 2A, H319 |
| 5-10 % | Isophorone diamine | CAS:2855-13-2 | Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312 |
| 5-10 % | Benzyl alcohol | CAS:100-51-6 | Acute Tox. 4, H302; Acute Tox. 4, H332 |
| 1-5 % | 3-(Dimethylamino)-propylamine | CAS:109-55-7 | Flam. Liq. 3, H226; Skin Corr. 1B, H314; Skin Sens. 1, H317; Acute Tox. 4, H302 |

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Remove contaminated clothing immediately and dispose off safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: N.A.
- Explosive properties: N.A.
- Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

- Use suitable breathing apparatus.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No Data Available

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Viscous amber

Odour: like: Amines

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >100 °C (212 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.00 g/cm³

Solubility in water: Insoluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

| | | |
|-------------------------------|-------------------|---|
| Isophorone diamine | a) acute toxicity | LD50 Oral Rat = 1030mg/kg |
| Benzyl alcohol | a) acute toxicity | LD50 Skin Rabbit = 2000,00000mg/kg LC50 Inhalation Rat = 8,80000mg/l 4h LD50 Oral Rat = 1230mg/kg |
| 3-(Dimethylamino)-propylamine | a) acute toxicity | LC50 Inhalation Rat > 431mg/l 4h LD50 Oral Rat = 922mg/kg |

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

None

Substance(s) listed as OSHA Carcinogen(s):

None

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

| Quantity | Component | Ident. Numb. | Ecotox Infos |
|----------|-------------------------------|----------------|---|
| 5-10 % | Isophorone diamine | CAS: 2855-13-2 | EC50 a) Aquatic acute toxicity Daphnia Daphnia magna=14,60000mg/L 48h EPA EC50 a) Aquatic acute toxicity Daphnia magna= 42,00000mg/L 24hr EC50 a) Aquatic acute toxicity Algae Desmodesmus subspicatus= 37mg/L 72h IUCLID EC50 a) Aquatic acute toxicity Algae idus= 110,00000mg/L 96h |
| 5-10 % | Benzyl alcohol | CAS: 100-51-6 | LC50 a) Aquatic acute toxicity Fish Pimephales promelas= 460mg/L 96h EPA LC50 a) Aquatic acute toxicity Fish Lepomis macrochirus= 10mg/L 96h EPA EC50 a) Aquatic acute toxicity Daphnia water flea= 23mg/L 48h |
| 1-5 % | 3-(Dimethylamino)-propylamine | CAS: 109-55-7 | EC50 a) Aquatic acute toxicity Daphnia Daphnia magna= 595mg/L 48h IUCLID EC50 a) Aquatic acute toxicity Algae Desmodesmus subspicatus= 562mg/L 72h IUCLID EC50 a) Aquatic acute toxicity Algae Desmodesmus subspicatus= 575mg/L 96h IUCLID |

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: 2735

DOT-UN Number: UN2735

IATA-Un number: 2735

IMDG-Un number: 2735

UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.

DOT-Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Isophorone diamine)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine)

Transport hazard class(es)

ADR-Class: 8

DOT-Hazard Class: 8

IATA-Class: 8

IMDG-Class: 8

Packing group

ADR-Packing Group: III

DOT-Packing group: III

IATA-Packing group: III

IMDG-Packing group: III

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):
DOT-Special Provision(s): IB3, T7, TP1, TP28
DOT-Label(s): 8
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):
ADR-Label: 8
ADR-Hazard identification number: 80
ADR-Tunnel Restriction Code: 3 (E)

Air (IATA):
IATA-Passenger Aircraft: 852
IATA-Cargo Aircraft: 856
IATA-Label: 8
IATA-Subrisk: -
IATA-Erg: 8L
IATA-Special Provisions: A3 A803

Sea (IMDG):
IMDG-Stowage Code: Category A
IMDG-Stowage Note: "Separated from" acids.
IMDG-Subrisk: -
IMDG-Special Provisions: 223 274
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-A, S-B
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

| | | |
|--|-------------------|------------|
| Fatty acids, tall-oil, polymers with bisphenol A, diethylenetriamine, epichlorohydrin and tetraethylenepentamine | is listed in TSCA | Section 8b |
| Isophorone diamine | is listed in TSCA | Section 8b |
| Benzyl alcohol | is listed in TSCA | Section 8b |
| 3-(Dimethylamino)-propylamine | is listed in TSCA | Section 8b |

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

CAA - Clean Air Act

CAA listed substances:

| | | |
|----------------|------------------|----------------------|
| Benzyl alcohol | is listed in CAA | Section 112(b) - HON |
|----------------|------------------|----------------------|

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

no substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Benzyl alcohol

3-(Dimethylamino)-propylamine

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Benzyl alcohol

3-(Dimethylamino)-propylamine

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Isophorone diamine

3-(Dimethylamino)-propylamine

16. OTHER INFORMATION

| Code | Description |
|------|--|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H412 | Harmful to aquatic life with long lasting effects. |

Safety Data Sheet dated: 5/13/2015 - version 1

Product code: 1949

Additional classification information



HMIS Health: 3 = Serious

HMIS Health - Is health hazard chronic?: Yes

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 3 = Serious

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.