



SAFETY DATA SHEET

SDS No. 1683A

Revision Date: 12/1/2017

Version: 1.0

Section 1 - Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Trade Name: **Plasti-Paste® Epoxy Part A**

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

General Use: Formulated Epoxy Resin

Restrictions on Use: None known

1.3 Details of the supplier of the safety data sheet:

Company: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062

Telephone: Phone (610) 252-5800

E-mail address of person responsible for the SDS: Visit our website at www.smooth-on.com or email sds@smooth-on.com

1.4 **Emergency Contact:** Chem-Tel Domestic: 800-255-3924 International: 813-248-0585

Section 2 – Hazard(s) Identification

2.1 Classification of the substance or mixture:

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

H315 Skin irritation – Category 2

H317 Skin sensitization – Category 1

H319 Eye irritation – Category 2

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 GHS Label elements, including precautionary statements



Pictogram(s):

Signal word: Warning

Health Hazards

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

General Precautions

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Prevention Precautions

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response Precautions

P302 + P352 IF ON SKIN: Wash with plenty of soap and 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.

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.

Disposal Precautions

P501 Dispose of contents/container according to local, state and federal laws.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none known

This product contains a chemical known to be hazardous according to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). (See also Section 3 and 15)

Section 3 - Composition / Information on Ingredients

3.1 Substances/Mixtures

| Chemical name | Classification | Concentration |
|--|---|---------------|
| Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis-, homopolymer | | |
| CAS-No. 25085-99-8 | Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; H315, H317, H319 | 25% – 100% |

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact

Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact

In case of skin contact, wash thoroughly with soap and water.

Ingestion

Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

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

None known.

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

None known.

Section 5 - Fire-Fighting Measures

5.1 Extinguishing Media

Water Fog, Dry Chemical, and Carbon Dioxide Foam

5.2 Special hazards arising from the substance or mixture

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.

5.3 Advice for firefighters

Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure demand or positive-pressure mode.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.

6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Put on appropriate protective gear including approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. Dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

6.4 Reference to other sections

See Section 3 for list of Hazardous Ingredients; Sections 8 for Exposure Controls; and Section 13 for Disposal.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet local standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage.

Empty containers retain residue and may be dangerous. Avoid water contamination.

7.3 Specific end use(s)

These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

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|--|
| Section 8 - Exposure Controls / Personal Protection |
|--|

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls**Engineering measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protective measures

Ensure that eye flushing systems and safety showers are located close to the working place.

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|---|
| Section 9 - Physical and Chemical Properties |
|---|

9.1 Information on basic physical and chemical properties:

| | | | |
|----------------------------------|---------|---|----------------------|
| Appearance: | Paste | Vapor pressure: | <0.00016 mmHg @ 68°F |
| Odor: | Musty | Vapor density (Air=1): | >1 |
| Odor threshold: | No data | Relative density: | No data |
| pH: | No data | Solubility in water: | Insoluble |
| Melting / freezing point: | No data | Partition coefficient (n-octanol/water): | No data |
| Low / high boiling point: | >390°F | Auto-ignition temperature: | No data |

| | | | |
|--|---------|---|---------|
| Flash Point: | >300°F | Decomposition temperature: | No data |
| Evaporation rate: | No data | Viscosity: | No data |
| Flammability (solid, gas): | No data | Explosive properties: | No data |
| Upper/lower flammability or explosive limits: | No data | Specific Gravity (H₂O=1, at 4 °C) | 1.0 |

Section 10 - Stability and Reactivity

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated. No corrosive effect on metal. Not fire propagating.

10.2 Chemical stability

These products are stable at room temperature in closed containers under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

Polymerization may occur. Reacts with water with formation of carbon dioxide. Risk of bursting.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Water (and moisture), amines, strong acids and bases, alcohols.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

Section 11- Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. LD50, Rat, >15,000 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts. 1D50, Rabbit, 23,000 mg/kg

Acute inhalation toxicity

At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation. The LC50 has not been determined.

Skin Corrosion/Irritation

Prolonged contact may cause skin irritation with local redness.

Serious Eye Damage/Irritation

May cause eye irritation.
Corneal injury is unlikely.

Respiratory/Skin Sensitization

For similar material(s):
Has caused allergic skin reactions in humans.
Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:
No relevant data found.

Germ Cell Mutagenicity

No data available

Carcinogenicity

Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEbPA). Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEbPA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all the data are considered, the weight of evidence does not show that DGEbPA is carcinogenic.

Reproductive Toxicity

No data available

Specific Target Organ Toxicity – Single Exposure

No data available

Specific Target Organ Toxicity – Repeated Exposure

Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

Aspiration Hazard

No data available

Potential Health Effects – Miscellaneous

No data available

Section 12 - Ecological Information**12.1 Toxicity****Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, *Oncorhynchus mykiss* (rainbow trout), semi-static test, 96 Hour, 2 mg/l

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 1.8 mg/l

Acute toxicity to algae/aquatic plants

ErC50, *Scenedesmus capricornutum* (fresh water algae), static test, 72 Hour, Growth rate inhibition, 11 mg/l

Toxicity to bacteria

LC50, Bacteria, 1B Hour, Respiration rates > 42.6 mg/l

Chronic aquatic toxicity**Chronic toxicity to aquatic invertebrates**

MATC (Maximum Acceptable Toxicant Level), Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 0.55 mg/l

12.2 Persistence and Degradability

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. 10-day Window: Not applicable

Biodegradation: 12 %

Exposure time: 28 d

Method: OECD Test Guideline 3028 or Equivalent

Theoretical Oxygen Demand: 2.35 mg/mg Estimated.

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Atmospheric half-life: 1.92 Hour

Method: Estimated.

12.3 Bioaccumulative Potential

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n octanol/water (log Pow): 3.242 at 25 °C Estimated.

12.4 Mobility in Soil

Potential for mobility in soil is low (Koc between 500 and 2000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. Partition coefficient(Koc): 1800 - 4400 Estimated.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other Adverse Effects

No data available

Section 13 - Disposal Considerations
13.1 Waste treatment methods

Under Resource Conservation and Recovery Act (RCRA) it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste as defined in 40 CFR Part 261. Waste management should be in full compliance with federal, state and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information

Not regulated by DOT, IATA or IMDG

- 14.1 UN number**
None known.
- 14.2 UN proper shipping name**
None known.
- 14.3 Transport hazard class(s)**
None known.
- 14.4 Packing group**
None known.
- 14.5 Environmental hazards**
None known.
- 14.6 Special precautions for user**
None known.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
None known.

Section 15 - Regulatory Information

- 15.1 Safety health and environmental regulations/legislation specific for the substance or mixture**

REACH: Regulation (EC) No 1907/2006 of The European Parliament and of The Council of December 2006 (including amendments and corrigenda as of 17 February 2016)

This product complies with REACH or is not subject to regulation under REACH. The product does not contain an ingredient listed on either the Candidate List or Authorization List for Substances of Very High Concern (SVHC).

In the United States (EPA Regulations)

TSCA Inventory Status (40 CFR710)

All components of this formulation are listed in the TSCA Inventory. No component of this formulation has been determined to be subject to manufacturing or use restrictions under the Significant New Use Rules (SNURs).

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

Immediate (Acute)

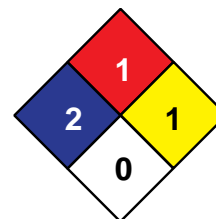
California Proposition 65

This product does not intentionally contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

15.2 Chemical safety assessment: No chemical safety assessment has been carried out for this substance/mixture by the supplier.

| |
|-------------------------------|
| 16 - Other Information |
|-------------------------------|

| HMIS | |
|------|---|
| H | 2 |
| F | 1 |
| R | 1 |



NFPA

Full text of H-Statements referred to under Sections 2 and 3.

H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation

Glossary

ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

Disclaimer

The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.



SAFETY DATA SHEET

SDS No. 1683B

Revision Date: 12/1/2017

Version: 1.0

Section 1 - Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Identifier**
Trade Name: **Plasti-Paste® Epoxy Part B**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
General Use: Formulated Epoxy Resin
Restrictions on Use: None known
- 1.3 Details of the supplier of the safety data sheet:**
Company: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062
Telephone: Phone (610) 252-5800

E-mail address of person responsible for the SDS: Visit our website at www.smooth-on.com or email sds@smooth-on.com
- 1.4 Emergency Contact:** Chem-Tel Domestic: 800-255-3924 International: 813-248-0585

Section 2 – Hazard(s) Identification

2.1 Classification of the substance or mixture:

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

- H314 Skin Corrosion – Category 1B
- H317 Skin Sensitization – Category 1
- H318 Serious Eye Damage – Category 1
- H412 Chronic aquatic toxicity - Category 3

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 GHS Label elements, including precautionary statements



Pictogram(s):

Signal word: Danger

Health Hazards

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.

Environmental Hazards

- H412 Harmful to aquatic life with long lasting effects.

General Precautions

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.

Prevention Precautions

| | |
|------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| P264 | Wash skin thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

Response Precautions

| | |
|--------------------|--|
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| 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. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

Disposal Precautions

| | |
|------|---|
| P501 | Dispose of contents/container according to local, state and federal laws. |
|------|---|

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none known**Section 3 - Composition / Information on Ingredients****3.1 Substances/Mixtures**

| Chemical name | Classification | Concentration |
|---|--|---------------|
| (1,2 -Ethanediamine, N1,N2 - bis(2-aminoethyl) polymer with 2-methyloxirane) | | |
| CAS-No. 26950-63-0 | Skin Irrit. 2; Skin Sens. 1; Eye Dam. 1; H315, H317, H318 | 25% – 100% |
| Triethylenetetramine | | |
| CAS-No. 112-24-3 | Acute Tox. 4; Skin Corr. 1B; Skin Sens. 1; Aquatic Chronic 3; H312, H314, H317, H412 | 10% – 20% |

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 - First Aid Measures**4.1 Description of first aid measures****Inhalation**

Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact

Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact

In case of skin contact, wash thoroughly with soap and water.

Ingestion

Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

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

None known.

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

None known.

Section 5 - Fire-Fighting Measures**5.1 Extinguishing Media**

Water Fog, Dry Chemical, and Carbon Dioxide Foam

5.2 Special hazards arising from the substance or mixture

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.

5.3 Advice for firefighters

Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure demand or positive-pressure mode.

Section 6 - Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.

6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains or unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Put on appropriate protective gear including approved self-contained breathing apparatus, rubber boots and heavy rubber gloves. Dike and contain spill; absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

6.4 Reference to other sections

See Section 3 for list of Hazardous Ingredients; Sections 8 for Exposure Controls; and Section 13 for Disposal.

Section 7 - Handling and Storage**7.1 Precautions for safe handling**

Use good general housekeeping procedures. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet local standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Avoid water contamination.

7.3 Specific end use(s)

These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

Section 8 - Exposure Controls / Personal Protection**8.1 Control parameters**

| | | | |
|------------------------------|------------|-----------------------------|------|
| 3,6-diazaoctanethylenediamin | WEEL (TWA) | 6 mg/m ³ , 1 ppm | Skin |
|------------------------------|------------|-----------------------------|------|

8.2 Exposure controls**Engineering measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protective measures

Ensure that eye flushing systems and safety showers are located close to the working place.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

| | | | |
|--|---------------|---|-----------|
| Appearance: | Yellow liquid | Vapor pressure: | No data |
| Odor: | Musty | Vapor density (Air=1): | >1 |
| Odor threshold: | No data | Relative density: | No data |
| pH: | No data | Solubility in water: | Insoluble |
| Melting / freezing point: | No data | Partition coefficient (n-octanol/water): | No data |
| Low / high boiling point: | No data | Auto-ignition temperature: | No data |
| Flash Point: | No data | Decomposition temperature: | No data |
| Evaporation rate: | No data | Viscosity: | 2000 cPs |
| Flammability (solid, gas): | No data | Explosive properties: | No data |
| Upper/lower flammability or explosive limits: | No data | Specific Gravity (H₂O=1, at 4 °C) | 1.0 |

Section 10 - Stability and Reactivity

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated., No corrosive effect on metal. Not fire propagating.

10.2 Chemical stability

These products are stable at room temperature in closed containers under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

Polymerization may occur. Reacts with water with formation of carbon dioxide. Risk of bursting.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Water (and moisture), amines, strong acids and bases, alcohols.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

Section 11- Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity

Triethylenetetramine

CAS# 112-24-3

Acute oral toxicity

LD50, Rat, 1,716 mg/kg

Acute dermal toxicity

LD50, Rabbit, >2,000 mg/kg

Skin Corrosion/Irritation

Prolonged contact may cause skin irritation with local redness.

Serious Eye Damage/Irritation

Corneal edema may give rise to a perception of, "blue haze" or "log" around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere. Severe eye irritation.

Respiratory/Skin Sensitization

Sensitization possible through skin contact. Sensitizing effect through inhalation is possible by prolonged exposure.

Germ Cell Mutagenicity

No data available

Carcinogenicity

No data available

Reproductive Toxicity

No data available

Specific Target Organ Toxicity – Single Exposure

No data available

Specific Target Organ Toxicity – Repeated Exposure

No data available

Aspiration Hazard

No data available

Potential Health Effects – Miscellaneous

No data available

Section 12 - Ecological Information**12.1 Toxicity**

No data available

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulative Potential

No data available

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

Section 13 - Disposal Considerations**13.1 Waste treatment methods**

Under Resource Conservation and Recovery Act (RCRA) it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste as defined in 40 CFR Part 261. Waste management should be in full compliance with federal, state and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information**Regulated by DOT, IATA or IMDG**

14.1 UN number: 2735

14.2 UN proper shipping name: Amines, liquid, corrosive, n.o.s. (Triethylenetetramine)

14.3 Transport hazard class(s): 8

14.4 Packing group: III

14.5 Environmental hazards: None known.

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: None known.

Section 15 - Regulatory Information**15.1 Safety health and environmental regulations/legislation specific for the substance or mixture****REACH: Regulation (EC) No 1907/2006 of The European Parliament and of The Council of December 2006 (including amendments and corrigenda as of 17 February 2016)**

This product complies with REACH or is not subject to regulation under REACH. The product does not contain an ingredient listed on either the Candidate List or Authorization List for Substances of Very High Concern (SVHC).

In the United States (EPA Regulations)**TSCA Inventory Status (40 CFR710)**

All components of this formulation are listed in the TSCA Inventory. No component of this formulation has been determined to be subject to manufacturing or use restrictions under the Significant New Use Rules (SNURs).

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

Immediate (Acute)

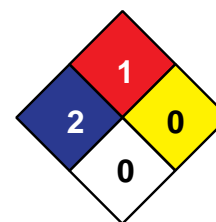
California Proposition 65

This product does not intentionally contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

15.2 Chemical safety assessment: No chemical safety assessment has been carried out for this substance/mixture by the supplier.

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| 16 - Other Information |
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| HMIS | |
|------|---|
| H | 2 |
| F | 1 |
| R | 0 |



NFPA

Full text of H-Statements referred to under Sections 2 and 3.

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| 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. |
| H412 | Harmful to aquatic life with long lasting effects. |

Glossary

ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

Disclaimer

The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

