


SpecPrep SB

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SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

| | |
|--|--|
| <p>1.1 Trade Name (as labeled): Synonyms: CAS No:</p> <p>1.2 Product Use:</p> <p>1.3 Company Name: Company Address: Company Address Cont: Business Phone: Website:</p> <p>1.4 Emergency Telephone Number:</p> <p>Date of Last Revision: Date of Current Revision:</p> | <p>SpecPrep SB Part A N/A Mixture</p> <p>Epoxy bonding adhesive</p> <p>SpecChem 1511 Baltimore Ave; Suite 600 Kansas City, MO 64108 (816) 968-5600 www.specchemllc.com</p> <p>VelocityEHS 1-(800)255-3924 (North America) +1-813-248-0585 (International) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico)</p> <p>March 9, 2015 July 1, 2018</p> |
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SECTION 2 – HAZARDS IDENTIFICATION

| | |
|---|---|
| <p>US DOT Symbols:</p> <p>EU and GHS Symbols:</p> <p>Signal Word:</p> <p>Components Contributing to Classification:</p> <p>2.2 Label Elements: Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation.</p> <p>Hazard Statements:</p> <p>Precautionary Statements:</p> <p>Response Statements:</p> | <p>Not Regulated</p>  <p>Warning</p> <p>Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700)</p> <p>Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. Contains epoxy constituents. May produce an allergic reaction.</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>IF ON SKIN: Wash with plenty of soap and water.</p> |
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Storage Statements: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Disposal Statements: If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
 Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Health Hazards or Risks From Exposure:
 The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredients | WT% | CAS No. | EINECS No. | Hazard Classification |
|---|--------|------------|------------|--|
| Bisphenol A Diglycidyl Ether Resin | 60-70% | 25068-38-6 | 500-033-5 | Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, Aquatic Chronic 2 |
| Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers). | | | | |

Note: All WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250:2000

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye Contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Inhalation: Supply fresh air and to be sure call for a doctor.

Ingestion: Drink plenty of water and provide fresh air. Call for a doctor immediately.

Medical Conditions Generally Aggravated By Exposure: No further relevant information available.

4.2 Symptoms and Effects Both Acute and Delayed: No further relevant information available.

4.3 Recommendations to Physicians: No further relevant information available.

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SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Ensure good ventilation/exhaustion at the workplace.

7.2 Information about fire - and explosion protection:

Protect from heat.

7.3 Further information about storage conditions:

Keep container tightly sealed. Store receptacle in a well ventilated area.

7.4 Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles. Store in a cool location.

7.5 Specific Uses:

No further relevant information available.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Additional information about design of technical facilities:

No further data; see item 7.

8.2 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Not required.

Additional information:

The lists valid during the making were used as basis.

8.3 Exposure controls

Personal protective equipment:

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands: Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety glasses.

Tightly sealed goggles.

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Body protection:
 Use protective suit. Boots.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties:****Appearance (Physical State and Color):** White**Odor:** Mild**Odor Threshold:** No data available**pH:** No data available**Melting/Freezing Point:** No data available**Boiling Point:** >212°C**Flash Point:** 252°C**Danger of Explosion:** Product does not present explosion hazard.**Vapor Pressure (hPa @ 77°C):** 0.03 hPa**Relative Density (@ 20°C):** 1.06g/cm³ ± 0.02**Solubility in Water:** soluble**9.2 Other information:**

No further relevant information available.

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

This product is not reactive.

10.2 Stability:

No decomposition if used and stored according to specifications.

10.3 Possibility of Hazardous Reactions:

Reacts with amines.

10.4 Conditions to Avoid:

Reacts with acids, alkalis and oxidizing agents.

10.5 Incompatible Substances:

No further relevant information available.

10.6 Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.**SECTION 11 – TOXICOLOGY INFORMATION****11.1 Information on Toxicological Effects:****Acute Toxicity:****· LD/LC50 values relevant for classification:**

25068-38-6 Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700)

| | | |
|--------|------|----------------------|
| Oral | LD50 | >5000 mg/kg (rat) |
| Dermal | LD50 | 20000 mg/kg (rabbit) |

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Irritancy: Skin, eye irritant.
Sensitization to the Product: May cause sensitization by skin contact.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity:

· Aquatic toxicity:

25068-38-6 Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin
 (number average molecular weight ≤ 700)

EC50 1.8 mg/kg (daphnia)

12.2 Persistence and Degradability:

Not easily biodegradable.

12.3 Bioaccumulative Potential:

No further relevant information available.

12.4 Mobility in Soil:

No further relevant information available.

12.5 Results of PBT

and vPvB Assessment:

Not applicable.

12.6 Other Adverse Effects:

No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

13.2 Uncleaned packaging:

Disposal must be made according to official regulations.

SECTION 14 - TRANSPORTATION INFORMATION

14.1 U.S. Department of Transportation (DOT) Shipping Regulations:

This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

UN Identification Number:

UN 3082

UN proper Shipping Name:

Environmentally hazardous substance, liquid, n.o.s.
 (Epoxy resin)

Hazard Class Number and Description:

9 - Miscellaneous dangerous substances and articles.

Packing Group:

III

North American Emergency Response

Guidebook Number:

None

14.2 Environmental Hazards:

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| | |
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| Marine Pollutant: | The components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B). |
| 14.3 Special Precaution for User: | None |
| 14.4 International Air Transport Association Shipping Information (IATA): | This product is considered as dangerous goods. |
| 14.5 International Maritime Organization Shipping Information (IMO): | |
| UN Identification Number: | UN 3082 |
| Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin) |
| Hazard Class Number and Description: | 9 - Miscellaneous dangerous substances and articles. |
| Packing Group: | III |
| EMS-No: | F-A, S-F |

SECTION 15 – REGULATORY INFORMATION

15.1 Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

SECTION 16 – OTHER INFORMATION

Date of Printing: July 1, 2018

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. SpecChem assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, SpecChem assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

END OF SDS SHEET


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|--|---|

SECTION 2 – HAZARDS IDENTIFICATION

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|---|--|
| <p>US DOT Symbols:</p> <p>EU and GHS Symbols:</p> <p>Signal Word:</p> <p>Components Contributing to Classification:</p> <p>2.2 Label Elements: GHS Hazard Classifications:</p> <p>Hazard Statements:</p> <p>Precautionary Statements:</p> | <p>Not Regulated</p>  <p>Danger</p> <p>Benzyldimethylamine, 2-ethylhexanoic acid</p> <p>Skin corrosion/irritation – Category 2 Serious eye damage/eye irritation – Category 1 Toxic to reproduction [unborn child]–Category 2 Causes serious eye damage. Causes skin irritation. Suspected of damaging the unborn child.</p> <p>Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective: > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL). Wear eye or face protection. Wash hands thoroughly after handling. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before use. If skin</p> |
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irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredients | WT% | CAS No. |
|---|-----|----------|
| Benzyl dimethylamine | 3-7 | 103-83-3 |
| 2-ethylhexanoic | 3-7 | 149-57-5 |
| Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers). | | |

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures:

- Eye Contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Skin Contact:** Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion:** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small amounts of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Inhalation:** Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for

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breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrests occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medial surveillance for 48 hours.

Most important symptoms/effects, acute and delayed

Potential acute health effects:

- Eye Contact:** Causes serious eye damage.
- Inhalations:** May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin Contact:** Causes skin irritation.
- Ingestion:** May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye Contact:** Adverse symptoms may include the following:
Pain
Watering
Redness
- Inhalation:** Adverse symptoms may include the following:
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations
- Ingestion:** Adverse symptoms may include the following:
Stomach pains
Reduced fetal weight
Increase in fetal deaths
Skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.
- Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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SECTION 5 – FIRE FIGHTING MEASURES

Flash point: Closed cup: >100°C (>212°F) [Data based on tests on similar products]

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.\

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:

Decomposition products may include the following materials:

Carbon Dioxide, Carbon Monoxide, Nitrogen Gases.

Special Protective Actions for Fire-Fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective Equipment for Fire-Fighters:

Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal Precautions, Protective Equipment and Emergency Procedures:

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental Precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up:

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal

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contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling

Protective measures:

Put on appropriate protective equipment (see Section 8). Avoid exposure-obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do no reuse container.

Advice on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Removed contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities:

Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready to sue. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Occupational exposure limits:

| Ingredient Name | Exposure Limits |
|----------------------|---|
| 2-ethylhexanoic acid | ACGIH TLV (United States, 6/2013). TWA: 4 mg/m ³ 8 hours. Form: Inhalable fraction and vapor. |

Appropriate engineering controls:

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eye wash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL).

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based

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Respiratory protection:

on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Thermal hazards:

Not available.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance (Physical State and Color): Light yellow liquid

Odor: Slight

Odor Threshold: No data available

pH: Not available

Melting/Freezing Point: No data available

Boiling Point: Not available

Flash Point: Closed cup: >100°C (>212°F) [Data based on tests on similar product]

Evaporation Rate: No data available

Flammability (Solid; Gas): Not applicable

Upper/Lower Flammability or Explosion Limits: No data available

Vapor Pressure (mm Hg @ 20°C (68° F): Not available

Vapor Density: No data available

Relative Density: Not available

Solubility in Water: Soluble

Weight per Gallon: No data available

Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: No data available

Decomposition Temperature: >140°C (>284°F)

Density: 1.04 g/cm³

Viscosity: No data available

9.2 Other Information: No data available

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity:

No specific test data related to reactivity available for this product or its ingredients.

10.2 Stability:

This product is stable.

10.3 Possibility of Hazardous Reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid:

No specific data.

10.5 Incompatible Substances:

No specific data.

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10.6 Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 – TOXICOLOGY INFORMATION**11.1 Information on Toxicological Effects:****Acute toxicity**

| Product/Ingredient Name | Test | Endpoint | Species | Result |
|-------------------------|--------------------------------|-----------------------|------------------|------------------------|
| Benzyltrimethylamine | No official guidelines | LC50 Inhalation Vapor | Rat-Male, Female | 2052 mg/m ³ |
| | No official guidelines | LD50 Dermal | Rabbit – Male | 1.66 ml/kg |
| | No official guidelines | LD50 Oral | Rat-Male, Female | 579 mg/kg |
| 2-ethylhexanoic acid | OECD 402 Acute Dermal Toxicity | LD50 Dermal | Rat-Male, Female | >2000 mg/kg |
| | OECD 401 Acute Oral Toxicity | LD50 Oral | Rat – Female | 2043 mg/kg |

Irritation/Corrosion

| Product/Ingredient Name | Test | Species | Result |
|-------------------------|--|---------|------------------------|
| Benzyltrimethylamine | OECD 404 Acute Dermal Irritation/Corrosion | Rabbit | Skin – Corrosive |
| | No official guidelines | Rabbit | Eyes – Severe Irritant |
| 2-ethylhexanoic acid | OECD 404 Acute Dermal Irritation/Corrosion | Rabbit | Skin – non-irritant |
| | OECD 405 Acute Eye Irritation/Corrosion | Rabbit | Eyes – non-irritant |

Conclusion/Summary

| | | |
|--------------------|----------------------|------------------------------|
| Skin | Benzyltrimethylamine | Corrosive to the skin. |
| | 2-ethylhexanoic acid | Non-irritating to the skin. |
| Eyes | Benzyltrimethylamine | Severely irritating to eyes. |
| | 2-ethylhexanoic acid | Non-irritating to the eyes. |
| Respiratory | Benzyltrimethylamine | No additional information. |
| | 2-ethylhexanoic acid | No additional information. |

Sensitization

| Product/Ingredient Name | Test | Route of Exposure | Species | Result |
|-------------------------|-----------------------------|-------------------|------------|-----------------|
| Benzyltrimethylamine | OECD 406 Skin Sensitization | Skin | Guinea pig | Not sensitizing |
| 2-ethylhexanoic acid | OECD 406 Skin Sensitization | Skin | Guinea pig | Not sensitizing |

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Mutagenicity

| Product/Ingredient Name | Test | Result |
|-------------------------|--|----------|
| Benzyltrimethylamine | Experiment: In vitro Subject: Bacteria Metabolic activation: +/- | Negative |
| | Experiment: In vitro Subject: Mammalian-Animal | Negative |
| | Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic | Negative |
| 2-ethylhexanoic acid | Experiment: In vitro Subject: Bacteria Metabolic activation: +/- | Negative |
| | Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic | Negative |
| | Experiment: In vivo Subject: Mammalian-Animal | Negative |

Conclusion/Summary:

Benzyltrimethylamine No mutagenic effect.

Carcinogenicity

Conclusion/Summary:

2-ethylhexanoic acid A study in animals has shown that doses produce embryo/foetotoxic effects.

Reproductive toxicity

| Product/Ingredient Name | Test | Species | Maternal toxicity | Fertility | Developmental Effects |
|-------------------------|------|-------------------|-------------------|-----------|-----------------------|
| 2-ethylhexanoic acid | - | Rat- Male, Female | Negative | Equivocal | Positive |

Conclusion/Summary:

Benzyltrimethylamine In accordance with section 1 of Regulation (EC) No 1907/2006, Annex XI, this test does not appear scientifically necessary.

Teratogenicity

| Product/Ingredient Name | Test | Species | Result/Result Type |
|-------------------------|---------|--------------|--------------------|
| 2-ethylhexanoic acid | EPA CFR | Rat – Female | Positive - Oral |

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure: Not available.

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Potential acute health effects

Eye Contact: Causes serious eye damage.
Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause health hazard. Serious effect may be delayed following exposure.
Skin Contact: Causes skin irritation.
Ingestion: May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye Contact: Adverse symptoms may include the following:
 Pain
 watering
 redness
Inhalation: Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
Skin Contact: Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
Ingestion: Adverse symptoms may include the following:
 stomach pains
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effect from short and long term exposure

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential chronic health effects

| Product/Ingredient Name | Test | Endpoint | Species | Result |
|-------------------------|--|------------------------|-------------------|-----------|
| Benzyltrimethylamine | OECD 407 Repeated Dose 28-day Oral Toxicity Study in Rodents | Sub-acute NOAEL Oral | Rat- Male, female | 150 mg/kg |
| 2-ethylhexanoic acid | EPA OPPTS EPA OPP .82-2 | Sub-chronic NOAEL Oral | Rat-Male, Female | 300 mg/kg |

General: No known significant effects or critical hazards.

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Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: Suspected of damaging the unborn child.
Developmental Effects: No known significant effects or critical hazards.
Fertility Effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information: Not available.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity:

| Product/Ingredient Name | Test | End Point | Exposure | Species | Result |
|-------------------------|---|---------------------------|---------------------|----------|------------|
| Benzyltrimethylamine | DIN DIN 38412 Part 8 | Acute EC50 | 17 Hours Static | Bacteria | 749.6 mg/l |
| | EU EC C.2 Acute Toxicity for Daphnia | Acute EC50 | 48 Hours Static | Daphnia | >100 mg/l |
| | EU EC C.3 Algal Inhibition Test | Acute ErC50 (growth rate) | 72 Hours Static | Algae | 1.34 mg/l |
| | OEDC 203 Fish, Acute Toxicity Test | Acute LC50 | 96 Hours Static | Fish | 37.8 mg/l |
| | DIN DIN 38412 Part 8 | Chronic EC10 | 17 Hours Static | Bacteria | 534 mg/l |
| | EU EC C.3 Algal Inhibition Test | Chronic LOAEL | 72 Hours Static | Algae | 0.24 mg/l |
| | EU | Chronic NOEC | 21 Days Semi-Static | Daphnia | 0.789 mg/l |
| 2-ethylhexanoic acid | OECD 202: Part I (Daphnia sp., acute immobilization test) | Acute EC50 | 48 Hours Static | Daphnia | 85.4 mg/l |
| | DIN DIN 38412 part 9 | Acute EgC50 | 72 Hours Static | Algae | 49.3 mg/l |
| | OECD 203 Fish, Acute Toxicity Test | Acute LC50 | 96 Hours Static | Fish | 180 mg/l |
| | DIN DIN 38412 Part 8 | Chronic EC10 | 17 Hours Static | Bacteria | 71.7 mg/l |
| | DIN DIN 38412 Part 9 | Chronic LOAEL | 72 Hours Static | Algae | 32 mg/l |
| | OECD 211 Daphnia Magna Reproduction Test | Chronic NOECr | 21 Days Semi-static | Daphnia | 25 mg/l |

Conclusion/Summary: Benzyltrimethylamine Harmful to aquatic organisms if run directly to surface waters.

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Persistence and degradability

| Product/Ingredient Name | Test | Period | Result |
|-------------------------|---|---------|----------|
| Benzyl dimethylamine | OECD 301C Ready Biodegradability – Modified MITI Test (I) | 28 Days | 0 to 2 % |
| 2-ethylhexanoic | OECD 301E Ready Biodegradability – Modified OECD Screening Test | 28 Days | 99 % |

Conclusion/Summary: Proprietary Component #1 Not readily biodegradable.

| Product/Ingredient Name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Benzyl dimethylamine | - | - | Not readily |
| 2-ethylhexanoic acid | - | - | Readily |

Bioaccumulative potential

| Product/Ingredient Name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-----------|-----------|
| Benzyl dimethylamine | 1.98 | 2.1 to 22 | Low |
| 2-ethylhexanoic acid | 2.7 | 60 | Low |

Mobility in soil

Not available.

Other adverse effects: No known significant effects or critical hazards.

Other ecological information

BOD5: Not determined.

COD: Not determined.

TOC: Not determined.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 - TRANSPORTATION INFORMATION

14.1 U.S. Department of Transportation (DOT) Shipping Regulations:

This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

UN Identification Number: Not Regulated
 Proper Shipping Name: None
 Hazard Class Number and Description: None
 Packing Group: None
 DOT Label(s) Required: None
 North American Emergency Response Guidebook Number: None

14.2 Environmental Hazards:

Marine Pollutant: The components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).
 None

14.3 Special Precaution for User:

14.4 International Air Transport Association

Shipping Information (IATA): This product is considered as dangerous goods.

14.5 International Maritime Organization

Shipping Information (IMO):

UN Identification Number: Not regulated
 Proper Shipping Name: None
 Hazard Class Number and Description: None
 Packing Group: None
 EMS-No: None

SECTION 15 – REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product

United States Regulations

TSCA 8(b) inventory: All components are listed or exempted.

TSCA 5(a) 2 Final Significant new use rule (SNUR): No ingredients listed.

TSCA 5(e) substance consent order: No ingredients listed.

TSCA 12(b) export notification: No ingredients listed.

SARA 311/312: Immediate (acute) health hazard
 Delayed (chronic) health hazard

Clean Air Act – Ozone

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| | |
|---|--|
| Depleting Substances (ODS): | This product does not contain nor is it manufactured with ozone depleting substances. |
| SARA 313: | No ingredients listed. |
| CERCLA Hazardous Substances: | No ingredients listed. |
| State Regulations | |
| PENNSYLVANIA – RTK: | No ingredients listed. |
| California Prop 65: | This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute. |
| Canadian Regulations | |
| CEPA DSL: | At least one component not listed. |
| WHMIS Classes: | Class D-1B: Material causing immediate and serious toxic effect (Toxic.) Class E: Corrosive material |
| This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all information required by the Controlled Products Regulations. | |
| Brazil Regulations | |
| Classification system used: | Norma ABNT-NBR 14725-2:2012 |
| International lists: | Australia Inventory (AICS): At least one component not listed. China Inventory (IECSC): At least one component not listed. Japan Inventory: All components are listed or exempted. Korea Inventory: At least one component is not listed. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): At least one component not listed. Philippines Inventory (PICCS): At least one component is not listed. Taiwan Inventory (CSNN): Not determined. |

SECTION 16 – OTHER INFORMATION

Date of Printing: July 1, 2018

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. SpecChem

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assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, SpecChem assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

END OF SDS SHEET

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SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

| | |
|--|--|
| 1.1 Trade Name (as labeled): | SpecPrep SB (Part C) |
| Synonyms: | N/A |
| CAS No: | Mixture |
| 1.2 Product Use: | Bonding agent component |
| 1.3 Company Name: | SpecChem |
| Company Address: | 1511 Baltimore Ave; Suite 600 |
| Company Address Cont: | Kansas City, MO 64108 |
| Business Phone: | (816) 968-5600 |
| Website: | www.specchemllc.com |
| 1.4 Emergency Telephone Number: | VelocityEHS 1-(800)255-3924 (North America) +1-813-248-0585 (International) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico) |
| Date of Last Revision: | February 1, 2015 |
| Date of Current Revision: | July 1, 2018 |

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a gray powder with minimal odor.

Health Hazards: May cause skin and respiratory irritation and burns to the eyes. Contact with skin may cause an allergic reaction. Repeated exposure may cause damage to the lungs. Contains components that are defined as human carcinogens.

Flammability Hazards: This product is not considered flammable.

Reactivity Hazards: None.

Environmental Hazards: The environmental effects of this product have not been investigated, however release may cause long term adverse environmental effects.

US DOT Symbols Not Regulated



EU and GHS Symbols

Signal Word Danger

2.1 EU Labeling and Classification:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number:

238-878-4 is not listed in Annex I

266-043-4 is not listed in Annex I

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Substances not listed either individually or in group entries must be self classified.

Components Contributing to Classification: Crystalline Silica (Quartz)/Silica Sand, Portland Cement, Calcium Oxide, Aluminum Sulfate

2.2 Label Elements:

GHS Hazard Classifications: Carcinogenicity Category 2
STOT – SE Category 3 (Respiratory System)
Skin Irritation Category 2
Skin Sensitization Category 1

Hazard Statements: Eye Damage Category 1
H351 Suspected of causing cancer
H373 May cause damage to organs (Respiratory System) through prolonged or repeated exposure
H335 May cause respiratory irritation
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage

Precautionary Statements: P201 Obtain special instructions before use.
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 thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace
P270 Do not eat, drink or smoke when using this product.

Response Statements: P280 Wear protective gloves/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/Doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P312 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Storage Statements: P310 Immediately call a POISON CENTER/Doctor.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

Disposal Statements: P501 Dispose of contents/container in accordance with local/regional/national/international regulations..

2.3 Health Hazards or Risks From Exposure:

Symptoms of Overexposure by Route of Exposure:

The most significant routes of overexposure for this product are by contact with skin or eyes. The symptoms of overexposure are described in the following paragraphs.

Acute:

- Inhalation: May cause respiratory irritation.
- Skin Contact: May cause irritation to skin.
- Eye Contact: Contact with the eyes may cause burns or irritation.
- Ingestion: May cause gastrointestinal irritation, nausea, and vomiting.

Chronic: Repeated exposure may cause skin dryness or cracking.

Target Organs:

- Acute: Eyes, Skin, Respiratory
- Chronic: Lung, Skin

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredients | WT% | CAS No. | EINECS No. | Hazard Classification |
|---|--------|------------|------------|---|
| Crystalline Silica (Quartz)/ Silica Sand | 50–70% | 14808-60-7 | 238-878-4 | Carc. 2, STOT RE2 |
| Portland Cement | 25–45% | 65997-15-1 | 266-043-4 | STOT SE3, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1 |
| Calcium Oxide | 3–10% | 1305-78-8 | 215-138-9 | STOT SE3, Skin Irrit. 2, Eye Dam. 1 |
| Aluminum Sulfate | 1–4% | 10043-01-3 | 233-135-0 | STOT SE3, Skin Irrit. 2, Eye Dam. 1 |
| Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers). | | | | |

Note: All WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250:2000

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye Contact: If product enters the eyes, flush with plenty of water or eye wash solution for several minutes. Remove contacts if present and easy to do. Seek medical attention if irritation persists.

Skin Contact: Wash skin thoroughly with soap and water after handling. Seek medical

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Inhalation: attention if irritation develops and persists. If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

Ingestion: If product is swallowed, call physician or poison center if you feel unwell. If professional advice is not available, do not induce vomiting. Never induce vomiting or give dilutents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Medical Conditions Generally Aggravated By Exposure: Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact.

4.2 Symptoms and Effects Both Acute and Delayed: Exposure to skin and respiratory may cause irritation. Contact with the eyes may cause burns. Contact with skin may cause an allergic reaction. Repeated exposure may cause damage to the lungs.

4.3 Recommendations to Physicians: Treat symptoms and eliminate overexposure.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Fire Extinguishing Materials:

Use the following fire extinguishing materials:

- Water Spray:** Yes
- Foam:** Yes
- Halon:** Yes
- Carbon Dioxide:** Yes
- Dry Chemical:** Yes
- Other:** Any “C” Class

5.2 Unusual Fire and Explosion Hazards:

Irritating and toxic fumes may be produced at high temperatures. Use of water may result if the formation of a toxic aqueous solution. Do not allow run-off from fire fighting to enter drains or water courses.

Explosive Sensitivity to Mechanical Impact: No
 Explosive Sensitivity to Static Discharge: No

5.3 Special Fire-Fighting Procedures:

- Incipient fire responders should wear eye protection.
- Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment.
- Isolate materials not yet involved in the fire and protect personnel.
- Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray.

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- If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

| <p>NFPA RATING SYSTEM</p> <p>Flammability: 0 Health: 2 Reactivity: 0 Other: -</p> | <p>HMIS RATING SYSTEM HAZARDOUS MATERIAL IDENTIFICATION SYSTEM</p> <table border="1"> <tr> <td style="background-color: #00b0f0; color: white;">HEALTH HAZARD (BLUE)</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #ff0000; color: white;">FLAMMABILITY HAZARD (RED)</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #ffff00; color: black;">PHYSICAL HAZARD (YELLOW)</td> <td style="text-align: center;">0</td> </tr> </table> <table border="1"> <thead> <tr> <th colspan="4">PROTECTIVE EQUIPMENT</th> </tr> <tr> <th>EYES</th> <th>RESPIRATORY</th> <th>HANDS</th> <th>BODY</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">See Sect 8</td> <td style="text-align: center;"></td> <td style="text-align: center;">See Sect 8</td> </tr> </tbody> </table> <p style="text-align: center; font-size: small;">For Routine Industrial Use and Handling Applications</p> | HEALTH HAZARD (BLUE) | 2 | FLAMMABILITY HAZARD (RED) | 0 | PHYSICAL HAZARD (YELLOW) | 0 | PROTECTIVE EQUIPMENT | | | | EYES | RESPIRATORY | HANDS | BODY | | See Sect 8 | | See Sect 8 |
|--|---|----------------------|------------|---------------------------|---|--------------------------|---|----------------------|--|--|--|------|-------------|-------|------|--|------------|--|------------|
| HEALTH HAZARD (BLUE) | 2 | | | | | | | | | | | | | | | | | | |
| FLAMMABILITY HAZARD (RED) | 0 | | | | | | | | | | | | | | | | | | |
| PHYSICAL HAZARD (YELLOW) | 0 | | | | | | | | | | | | | | | | | | |
| PROTECTIVE EQUIPMENT | | | | | | | | | | | | | | | | | | | |
| EYES | RESPIRATORY | HANDS | BODY | | | | | | | | | | | | | | | | |
| | See Sect 8 | | See Sect 8 | | | | | | | | | | | | | | | | |
| Hazard Scale: 0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Hazard | | | | | | | | | | | | | | | | | | | |

SECTION 6 – ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Use cautious judgment when cleaning up spill. Wear suitable protective clothing, gloves, and eye/face protection.

6.2 Environmental Precautions:

If liquid was introduced, construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

6.3 Spill and Leak Response:

Small Spills:

- Collect material via broom or mop. Place in tightly sealed containers for proper disposal.
- Approach spill areas with caution.
- If liquid was introduced, create a dike or trench to contain material.
- Soak up with absorbent material such as clay, sand or other suitable non-reactive material.

Large Spills:

- Place in leak-proof containers. Seal tightly for proper disposal.
- Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING AND STORAGE

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7.1 Precautions for Safe Handling:

To prevent eye contact under the foreseeable conditions of use, wear appropriate safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling.

7.2 Storage and Handling Practices:

Keep away from incompatible materials. Keep container closed when not in use and store in well ventilated area.

7.3 Specific Uses:

Rapid setting concrete repair mortar.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Parameters:

| Ingredients | CAS No. | OSHA PEL | NIOSH PEL | ACGIH TWA |
|---|------------|---|--|------------------|
| Crystalline Silica (Quartz)/Silica Sand | 14808-60-7 | TWA 0.1 mg/m3 (resp) TWA 0.3 mg/m3 (total) | Ca TWA 0.05 mg/m3 | 0.025 mg/m3 |
| Portland Cement | 65997-15-1 | TWA 5 mg/m3 (resp) TWA 15 mg/m3 (total) | TWA 5 mg/m3 (resp) TWA 10 mg/m3 (total) | 10 mg/m3 (total) |
| Calcium Oxide | 1305-78-8 | TWA 5 mg/m3 | TWA 2 mg/m3 | TWA 2 mg/m3 |
| Aluminum Sulfate | 10043-01-3 | TWA 2 mg/m3 | TWA 2 mg/m3 | TWA 2 mg/m3 |

8.2 Exposure Controls:

Ventilation and Engineering Controls:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory Protection:

Maintain airborne contaminant concentrations below guidelines listed above. Use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Eye Protection:

Safety glasses or goggles are required. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

Hand Protection:

Chemical resistant gloves are required to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European

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Body Protection:

Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.
Use body protect appropriate to task being performed.
If necessary, refer to appropriate Standards of Canada, or appropriate standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

Appearance (Physical State and Color): Gray powder

Odor: Minimal

Odor Threshold: No data available

pH: No data available

Melting/Freezing Point: No data available

Boiling Point: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability (Solid; Gas): No data available

Upper/Lower Flammability or Explosion Limits: No data available

Vapor Pressure (mm Hg @ 20°C (68° F): No data available

Vapor Density: No data available

Relative Density: No data available

Specific Gravity: 2.6 - 3.2

Solubility in Water: Miscible

Weight per Gallon: No data available

Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

9.2 Other Information: No data available

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity:

This product is not reactive.

10.2 Stability:

Stable under conditions of normal storage and use.

10.3 Possibility of Hazardous Reactions:

Will not occur.

10.4 Conditions to Avoid:

No data available.

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10.5 Incompatible Substances: Hydrogen fluoride.
10.6 Hazardous Decomposition Products: No data available.

SECTION 11 – TOXICOLOGY INFORMATION

11.1 Information on Toxicological Effects:
Toxicity Data: No data available
Suspected Cancer Agent: Crystalline Silica (Quartz)/Silica Sand (CAS 14808-60-7) is found on one or more of the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore is considered to be a cancer-causing agent by these agencies.
Irritancy: Skin, eye, and respiratory irritant.
Sensitization to the Product: This product is expected to cause skin sensitization.
Germ Cell Mutagenicity: This product does not contain ingredients that are suspected to be a germ cell mutagenic.
Reproductive Toxicity: This product is not expected to be a human reproductive toxicant.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity: No data available
12.2 Persistence and Degradability: No specific data available on this product.
12.3 Bioaccumulative Potential: No specific data available on this product.
12.4 Mobility in Soil: No specific data available on this product.
12.5 Results of PBT and vPvB Assessment: No specific data available on this product.
12.6 Other Adverse Effects: No data available
12.7 Water Endangerment Class: At present, there are no ecotoxicological assessments for this product.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Australia, EU Member States and Japan.
13.2 EU Waste Code: Not determined

SECTION 14 - TRANSPORTATION INFORMATION

14.1 U.S. Department of Transportation (DOT) Shipping Regulations:
This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.
UN Identification Number: Not applicable
Proper Shipping Name: Not regulated
Hazard Class Number and Description: Not applicable
Packing Group: Not applicable
DOT Label(s) Required: Not applicable

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| | |
|---|---|
| <p>North American Emergency Response Guidebook Number:</p> <p>14.2 Environmental Hazards:</p> <p>Marine Pollutant:</p> <p>14.3 Special Precaution for User:</p> <p>14.4 International Air Transport Association Shipping Information (IATA):</p> <p>14.5 International Maritime Organization Shipping Information (IMO):</p> <p>UN Identification Number:</p> <p>Proper Shipping Name:</p> <p>Hazard Class Number and Description:</p> <p>Packing Group:</p> <p>EMS-No:</p> | <p>Not applicable</p> <p>The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).</p> <p>None</p> <p>Not regulated.</p> <p>Not applicable</p> <p>Not regulated</p> <p>Not applicable</p> <p>Not applicable</p> <p>Not applicable</p> |
|---|---|

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations Specific for the Substance or Mixture:

United States Regulations:

U.S. SARA Reporting Requirements:
 The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA 311/312:
 Acute Health: Yes; Chronic Health: Yes; Fire: No; Reactivity: No

U.S. CERCLA Reportable Quantity:
 None

U.S. TSCA Inventory Status:
 The components of this product are listed on the TSCA Inventory or are exempted from listing.

Other U.S. Federal Regulations:
 None known

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):
 This product does contain “Silica, crystalline”, which is on the Proposition 65 Lists.

15.2 Canadian Regulations:

Canadian DSL/NDSL Inventory Status:
 Components are DSL Listed, NDSL Listed and/or are exempt from listing

Other Canadian Regulations:
 Not applicable

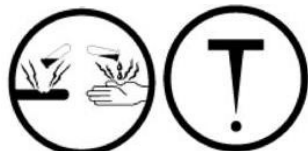
Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:
 This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian WHMIS Classification and Symbols:
 This product is Class E, Corrosive, and D2B, Materials causing other toxic effects, per WHMIS Controlled Product Regulations

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15.3 European Economic Community Information:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details.

Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 Australian Information for Product:

Components of this product are listed on the International Chemical Inventory list.

15.5 Japanese Information for Product:

Japanese Minister of International Trade and Industry (MITI) Status: The components of this product are not listed as Class I specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

15.6 International Chemical Inventories:

Listing of the components on individual country Chemical Inventories is as follows:

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

U.S. TSCA: Listed

SECTION 16 – OTHER INFORMATION

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. SpecChem assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, SpecChem assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

END OF SDS SHEET