

# Material Safety Data Sheet

Print Date 02-May-2011

Revision Date 02-May-2011

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                            |   |
|----------------------------|---|
| <b>Common name</b>         | SERIES 270 PART A   |
| <b>Product code</b>        | F270-11WHA  |
| <b>Trade name</b>          | STRANLOK WHITE  |
| <b>Product Class</b>       | EPOXY PAINT   |
| <b>Manufacturer</b>        | Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 |
| <b>Emergency telephone</b> | 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400       |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

HARMFUL IF INHALED.  
HARMFUL OR FATAL IF SWALLOWED.  
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.  
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.

#### Potential health effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### **Acute effects**

|                   |  |
|-------------------|--|
| <b>Eyes</b>       | Irritating to eyes.  |
| <b>Skin</b>       | Irritating to skin. May cause sensitization by skin contact. |
| <b>Inhalation</b> | Irritating to respiratory system.                            |
| <b>Ingestion</b>  | May be harmful if swallowed.                                 |

#### **Chronic effects**

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Central nervous system. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Blood, Central nervous system, Central Vascular System (CVS), Eyes, Kidney, Liver, Lungs, Nasal Cavities, Prostate, Respiratory system, Skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

| Component                     | CAS-No     | Weight % |
|-------------------------------|------------|----------|
| EPOXY RESIN (LER)             | 25085-99-8 | 60 - 100 |
| TALC (RESPIRABLE DUST)        | 14807-96-6 | 10 - 30  |
| TITANIUM DIOXIDE (TOTAL DUST) | 13463-67-7 | 5 - 10   |
| FIBROUS GLASS                 | 65997-17-3 | 1 - 5    |
| MINERAL FIBER                 | 65997-17-3 | 0.1 - 1  |
| ALUMINUM OXIDES               | 1344-28-1  | 0.1 - 1  |

### 4. FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Eye contact:</b>  | Rinse thoroughly with plenty of water for at least 15 minutes.           |
| <b>Skin contact:</b> | Wash off immediately with soap and plenty of water.                      |
| <b>Ingestion:</b>    | If swallowed, do not induce vomiting. Get medical attention immediately. |
| <b>Inhalation:</b>   | Move to fresh air. Oxygen or artificial respiration if needed.           |

### 5. FIRE-FIGHTING MEASURES

|  |   |
|--|---|
| <b>Flammable properties</b>                                  | No information available  |
| <b>Suitable extinguishing media</b>                          | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical         |
| <b>Hazardous decomposition products</b>                      | Oxides of carbon, hydrocarbons. Aldehydes.  |
| <b>Specific hazards arising from the chemical</b>            | Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.  |
| <b>Protective equipment and precautions for firefighters</b> | Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.  |
| <b>Environmental precautions</b> | Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.   |
| <b>Methods for cleaning up</b>   | If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. |
| <b>Other information</b>         | Not applicable  |

## 7. HANDLING AND STORAGE

### Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

### Storage

Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

| Component                     | ACGIH TLV   | OSHA PEL  | Quebec TWAEV   | Ontario TWAEV   | Mexico OEL (TWA)  |
|-------------------------------|---|---|--|---|---|
| TALC (RESPIRABLE DUST)        | : 2 mg/m <sup>3</sup> TWA<br>(particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)  | : 2 mg/m <sup>3</sup> TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)   | TWA: 3 mg/m <sup>3</sup> TWAEV (respirable dust)   | TWA: 2 mg/m <sup>3</sup> TWA (containing no Asbestos and <1% Crystalline silica, respirable)                            | : 2 mg/m <sup>3</sup> TWA (respirable fraction)   |
| TITANIUM DIOXIDE (TOTAL DUST) | : 10 mg/m <sup>3</sup> TWA  | : 10 mg/m <sup>3</sup> TWA (total dust) : 15 mg/m <sup>3</sup> TWA (total dust)   | TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)   | TWA: 10 mg/m <sup>3</sup> TWA (total dust)  | : 10 mg/m <sup>3</sup> TWA (as Ti) : 20 mg/m <sup>3</sup> STEL (as Ti)  |
| FIBROUS GLASS                 | : 1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers); 5 mg/m <sup>3</sup> TWA (inhalable fraction, listed under Synthetic vitreous fibers) | Ceiling: 5 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, respirable, containing no asbestos and less than 1% crystalline silica, listed under Fibres - Artificial vitreous mineral fibres) | TWA: 1 fibre/cm <sup>3</sup> TWA (length>5 microns, aspect ratio≥ 3.1, respirable); 5 mg/m <sup>3</sup> TWA (inhalable) | TWA: 0.15 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> |
| MINERAL FIBER                 | : 1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers); 5 mg/m <sup>3</sup> TWA (inhalable fraction, listed under Synthetic vitreous fibers) | Ceiling: 5 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, respirable, containing no asbestos and less than 1% crystalline silica, listed under Fibres - Artificial vitreous mineral fibres) | TWA: 1 fibre/cm <sup>3</sup> TWA (length>5 microns, aspect ratio≥ 3.1, respirable); 5 mg/m <sup>3</sup> TWA (inhalable) | TWA: 0.15 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> |
| ALUMINUM OXIDES               | TWA: 1 mg/m <sup>3</sup>  | : 10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction) : 15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction) | TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, containing no asbestos and less than 1% crystalline silica, as Al)  | TWA: 10 mg/m <sup>3</sup>   | : 10 mg/m <sup>3</sup> TWA  |

|                                       |   |
|---------------------------------------|---|
| <b>Engineering measures</b>           | Ensure adequate ventilation, especially in confined areas   |
| <b>Personal Protective Equipment</b>  |   |
| <b>Skin protection</b>                | Lightweight protective clothing, Apron, Impervious gloves   |
| <b>Eye/face protection</b>            | If splashes are likely to occur, wear Goggles.  |
| <b>Respiratory protection</b>         | <b>Use only with adequate ventilation.</b> Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                           |
|---|---------------------------|
| <b>Flash point</b>                              | 110°C / 230.0°F           |
| <b>Boiling range</b>                            | No information available  |
| <b>Upper explosion limit</b>                    | No information available  |
| <b>Lower explosion limit</b>                    | No information available  |
| <b>Evaporation rate</b>                         | No information available  |
| <b>Vapor pressure</b>                           | No information available  |
| <b>Vapor density</b>                            | No information available  |
| <b>Specific Gravity</b>                         | 1.34299 g/cm <sup>3</sup> |
| <b>Density</b>                                  | 11.17573 lbs/gal          |
| <b>Volatile organic compounds (VOC) content</b> | .031 lbs/gal              |
| <b>Volatile by weight</b>                       | .2820 %                   |
| <b>Volatile by volume</b>                       | .4648 %                   |

## 10. STABILITY AND REACTIVITY

|                              |  |   |                                     |
|------------------------------|--|---|-------------------------------------|
| <b>Chemical stability</b>    | Stable.  | <b>Conditions to avoid</b>                | Heat, flames and sparks.<br>Amines. |
| <b>Incompatible products</b> | Strong oxidizing agents. Bases.<br>Acids. Amines. Reducing agents. | <b>Possibility of hazardous reactions</b> | None under normal processing        |

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

### Component Information

| Component                     | LD50 Oral           | LD50 Dermal | LC50 Inhalation |
|-------------------------------|---------------------|-------------|-----------------|
| TITANIUM DIOXIDE (TOTAL DUST) | 10000 mg/kg ( Rat ) |             |                 |
| ALUMINUM OXIDES               | 5000 mg/kg ( Rat )  |             |                 |

|                      |                          |
|----------------------|--------------------------|
| <b>Irritation</b>    | No information available |
| <b>Corrosivity</b>   | No information available |
| <b>Sensitization</b> | No information available |

### Chronic toxicity

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | ACGIH | IARC | NTP | OSHA | Mexico |
|-----------|-------|------|-----|------|--------|
|-----------|-------|------|-----|------|--------|

|                               |  |                  |  |   |  |
|-------------------------------|--|------------------|--|---|--|
| TITANIUM DIOXIDE (TOTAL DUST) |  | Group 2B         |  | X |  |
| FIBROUS GLASS                 |  | Group 1 Group 2A |  |   |  |
| MINERAL FIBER                 |  | Group 1 Group 2A |  |   |  |

**Mutagenicity** No information available  
**Reproductive effects** No information available  
**Developmental effects** No information available  
**Teratogenicity** No information available  
**Target Organ Effects** Blood, Central nervous system, Central Vascular System (CVS), Eyes, Kidney, Liver, Lungs, Nasal Cavities, Prostate, Respiratory system, Skin.

**Endocrine Disruptor Information** No information available

| Component         | EU - Endocrine Disruptors Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor Information |
|-------------------|--|--|---|
| EPOXY RESIN (LER) | Group III Chemical                       |  |   |

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

| Component              | Toxicity to algae | Toxicity to fish   | Toxicity to microorganisms | Toxicity to daphnia  |
|------------------------|-------------------|--|----------------------------|--|
| TALC (RESPIRABLE DUST) |                   | LC50 > 100 g/L Brachydanio rerio 96 h  |                            |  |
| FIBROUS GLASS          |                   | LC50 5.6 - 7.4 µg/L Pimephales promelas 96 h<br>LC50 9.4 - 9.7 µg/L Pimephales promelas 96 h<br>LC50 24.2 - 48.4 µg/L Lepomis macrochirus 96 h |                            | EC50 = 0.9 µg/L 48 h LC50 = 5 µg/L 96 h LC50 1.4 - 2.3 µg/L 96 h |
| MINERAL FIBER          |                   | LC50 5.6 - 7.4 µg/L Pimephales promelas 96 h<br>LC50 9.4 - 9.7 µg/L Pimephales promelas 96 h<br>LC50 24.2 - 48.4 µg/L Lepomis macrochirus 96 h |                            | EC50 = 0.9 µg/L 48 h LC50 = 5 µg/L 96 h LC50 1.4 - 2.3 µg/L 96 h |

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

**Contaminated packaging** Empty containers should be taken for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION**

**DOT** Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

**Proper shipping name** PAINT IN OIL

**15. REGULATORY INFORMATION**

**International Inventories**

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDSL      | Complies        |
| EINECS/ELINCS | Does not Comply |
| CHINA         | Complies        |
| ENCS          | Does not Comply |
| KECL          | Complies        |
| PICCS         | Complies        |
| AICS          | Complies        |

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):  
**United States of America Federal Regulations**

**SARA 313**

| Component       | CAS-No    | Weight % | SARA 313 - Threshold Values                    |
|-----------------|-----------|----------|--|
| ALUMINUM OXIDES | 1344-28-1 | 0.1 - 1  | 1.0 % de minimis concentration (fibrous forms) |

**SARA 311/312 Hazardous Categorization**

|                                   |     |
|-----------------------------------|-----|
| Chronic Health Hazard             | yes |
| Acute Health Hazard               | yes |
| Fire Hazard                       | no  |
| Sudden Release of Pressure Hazard | no  |
| Reactive Hazard                   | no  |

| Component     | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| FIBROUS GLASS |                             | X                      |                           |                            |
| MINERAL FIBER |                             | X                      |                           |                            |

**CERCLA**

**United States of America State Regulations**

**California Prop. 65**

This product contains the following Proposition 65 chemicals:

| Component     | CAS-No     | California Prop. 65 |
|---------------|------------|---------------------|
| FIBROUS GLASS | 65997-17-3 | Carcinogen          |
| MINERAL FIBER | 65997-17-3 | Carcinogen          |

**State Right-to-Know**

| Component                     | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------------------|---------------|------------|--------------|----------|--------------|
| TALC (RESPIRABLE DUST)        | X             | X          | X            |          | X            |
| TITANIUM DIOXIDE (TOTAL DUST) | X             | X          | X            |          | X            |
| FIBROUS GLASS                 | X             | X          | X            | X        | X            |
| MINERAL FIBER                 | X             | X          | X            | X        | X            |
| ALUMINUM OXIDES               | X             | X          | X            |          | X            |

**Other international regulations**

**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

D2B Toxic materials



| Component       | NPRI                                     |
|-----------------|--|
| ALUMINUM OXIDES | Part 1, Group 1 Substance (fibrous form) |

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date 02-May-2011

Revision Note No information available

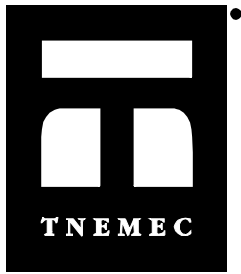
HMIS (Hazardous Material Information System)      Health 2\*      Flammability 1      Reactivity 1

**Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

**End of MSDS**



# Material Safety Data Sheet

Print Date 15-Apr-2011

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## 1. PRODUCT AND COMPANY IDENTIFICATION

|                            |   |
|----------------------------|---|
| <b>Common name</b>         | SERIES 270 PART B   |
| <b>Product code</b>        | F270-0270B  |
| <b>Trade name</b>          | STRANLOK CONVERTER  |
| <b>Product Class</b>       | MODIFIED ALIPHATIC AMINE PAINT  |
| <b>Manufacturer</b>        | Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 |
| <b>Emergency telephone</b> | 800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400        |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### WARNING!

CORROSIVE.  
HARMFUL IF INHALED.  
CAUSES SKIN AND EYE BURNS.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
HARMFUL OR FATAL IF SWALLOWED.

#### Potential health effects

**Principle Routes of Exposure** Eye contact, Inhalation, Skin contact.

#### Acute effects

**Eyes**

Causes burns.

**Skin**

Causes burns. May cause sensitization by skin contact.

**Inhalation**

Irritating to respiratory system.

**Ingestion**

May be harmful if swallowed.

#### Chronic effects

Avoid repeated exposure.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** Central nervous system. Kidney disorders. Liver disorders. Skin disorders. Respiratory disorders.

**Interactive effects** Use of alcoholic beverages may enhance toxic effects.

**Potential environmental effects** See Section 12 for additional Ecological Information

**Target Organ Effects** Blood, Central nervous system, Central Vascular System (CVS), Eyes, Kidney, Liver, Lungs, Nasal Cavities, Prostate, Respiratory system, Skin

## 3. COMPOSITION/INFORMATION ON INGREDIENTS



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

| Component                | CAS-No     | Weight % |
|--------------------------|------------|----------|
| MODIFIED ALIPHATIC AMINE | 9046-10-0  | 30 - 60  |
| NONYLPHENOL              | 84852-15-3 | 10 - 30  |
| TALC (RESPIRABLE DUST)   | 14807-96-6 | 10 - 30  |
| MODIFIED ALIPHATIC AMINE | 140-31-8   | 5 - 10   |
| FIBROUS GLASS            | 65997-17-3 | 1 - 5    |
| AMORPHOUS SILICA         | 7631-86-9  | 1 - 5    |
| ORGANOSILANE ESTER       |            | 1 - 5    |

### 4. FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Eye contact:</b>  | Rinse thoroughly with plenty of water for at least 15 minutes.           |
| <b>Skin contact:</b> | Wash off immediately with soap and plenty of water.                      |
| <b>Ingestion:</b>    | If swallowed, do not induce vomiting. Get medical attention immediately. |
| <b>Inhalation:</b>   | Move to fresh air. Oxygen or artificial respiration if needed.           |

### 5. FIRE-FIGHTING MEASURES

|  |   |
|--|---|
| <b>Flammable properties</b>                                  | No information available  |
| <b>Suitable extinguishing media</b>                          | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO <sub>2</sub> ) - Foam - Dry chemical         |
| <b>Hazardous decomposition products</b>                      | Oxides of carbon, hydrocarbons. Oxides of nitrogen. Aldehydes. Ammonia. Ketones.  |
| <b>Specific hazards arising from the chemical</b>            | Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.  |
| <b>Protective equipment and precautions for firefighters</b> | Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. May cause heat and pressure build-up in closed containers. |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.  |
| <b>Environmental precautions</b> | Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.   |
| <b>Methods for cleaning up</b>   | If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations. |
| <b>Other information</b>         | Not applicable  |

7. HANDLING AND STORAGE

**Handling**

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

**Storage**

Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

| Component              | ACGIH TLV   | OSHA PEL  | Quebec TWAEV   | Ontario TWAEV   | Mexico OEL (TWA)  |
|------------------------|---|---|--|---|---|
| TALC (RESPIRABLE DUST) | : 2 mg/m <sup>3</sup> TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)   | : 2 mg/m <sup>3</sup> TWA (<1% Crystalline silica, containing no Asbestos, respirable dust) | TWA: 3 mg/m <sup>3</sup> TWAEV (respirable dust)   | TWA: 2 mg/m <sup>3</sup> TWA (containing no Asbestos and <1% Crystalline silica, respirable)                            | : 2 mg/m <sup>3</sup> TWA (respirable fraction)   |
| FIBROUS GLASS          | : 1 fiber/cm <sup>3</sup> TWA (respirable fibers: length >5 μm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers); 5 mg/m <sup>3</sup> TWA (inhalable fraction, listed under Synthetic vitreous fibers) | Ceiling: 5 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup> TWAEV (total dust, respirable, containing no asbestos and less than 1% crystalline silica, listed under Fibres - Artificial vitreous mineral fibres) | TWA: 1 fibre/cm <sup>3</sup> TWA (length>5 microns, aspect ratio≥ 3.1, respirable); 5 mg/m <sup>3</sup> TWA (inhalable) | TWA: 0.15 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup> |

**Engineering measures**

Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment**

**Skin protection**

Lightweight protective clothing, Apron, Impervious gloves

**Eye/face protection**

Goggles. If splashes are likely to occur, wear face-shield.

**Respiratory protection**

**Use only with adequate ventilation.** Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Flash point**

110°C / 230.0°F

**Boiling range**

No information available

**Upper explosion limit**

No information available

**Lower explosion limit**

No information available

**Evaporation rate**

No information available

**Vapor pressure**

No information available

**Vapor density**

No information available

**Specific Gravity**

1.19190 g/cm<sup>3</sup>

**Density**

9.91839 lbs/gal

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|   |              |
|---|--------------|
| <b>Volatile organic compounds (VOC) content</b> | .000 lbs/gal |
| <b>Volatile by weight</b>                       | .0000 %      |
| <b>Volatile by volume</b>                       | .0000 %      |

**10. STABILITY AND REACTIVITY**

|                              |   |   |  |
|------------------------------|---|---|--|
| <b>Chemical stability</b>    | Stable.   | <b>Conditions to avoid</b>                | Heat, flames and sparks. Epoxy constituents. Contact with water liberates toxic gas (ethanol). |
| <b>Incompatible products</b> | Strong oxidizing agents. Bases. Acids. Metals . Hypochlorites. Peroxides. Reducing agents. Hydroxyl Compounds. Water, alcohols, amines, strong bases, metal components, surface active materials. | <b>Possibility of hazardous reactions</b> | None under normal processing   |

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Component Information**

| Component                | LD50 Oral          | LD50 Dermal           | LC50 Inhalation      |
|--------------------------|--------------------|-----------------------|----------------------|
| MODIFIED ALIPHATIC AMINE | 242 mg/kg ( Rat )  | 360 mg/kg ( Rabbit )  |                      |
| NONYLPHENOL              | 580 mg/kg ( Rat )  | 2031 mg/kg ( Rabbit ) |                      |
| MODIFIED ALIPHATIC AMINE | 2140 mg/kg ( Rat ) | 880 mg/kg ( Rabbit )  |                      |
| AMORPHOUS SILICA         | 5000 mg/kg ( Rat ) | 2000 mg/kg ( Rabbit ) | 2.2 mg/L ( Rat ) 1 h |
| ORGANOSILANE ESTER       | 1780 mg/kg ( Rat ) | 4 mL/kg ( Rabbit )    |                      |

|                      |                          |
|----------------------|--------------------------|
| <b>Irritation</b>    | No information available |
| <b>Corrosivity</b>   | No information available |
| <b>Sensitization</b> | No information available |

**Chronic toxicity**

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component     | ACGIH | IARC             | NTP | OSHA | Mexico |
|---------------|-------|------------------|-----|------|--------|
| FIBROUS GLASS |       | Group 1 Group 2A |     |      |        |

|  |   |
|--|---|
| <b>Mutagenicity</b>                    | No information available  |
| <b>Reproductive effects</b>            | No information available  |
| <b>Developmental effects</b>           | No information available  |
| <b>Teratogenicity</b>                  | No information available  |
| <b>Target Organ Effects</b>            | Blood, Central nervous system, Central Vascular System (CVS), Eyes, Kidney, Liver, Lungs, Nasal Cavities, Prostate, Respiratory system, Skin. |
| <b>Endocrine Disruptor Information</b> | No information available  |

| Component   | EU - Endocrine Disruptors Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor Information |
|-------------|--|--|---|
| NONYLPHENOL | Group II Chemical                        | Medium Exposure Concern                          |   |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Component                | Toxicity to algae  | Toxicity to fish   | Toxicity to microorganisms | Toxicity to daphnia  |
|--------------------------|--|--|----------------------------|--|
| NONYLPHENOL              | EC50 0.36 - 0.48 mg/L 96 h<br>EC50 0.16 - 0.72 mg/L 72 h<br>EC50 = 1.3 mg/L 72 h | LC50= 0.135 mg/L Pimephales promelas 96 h<br>LC50= 0.1351 mg/L Lepomis macrochirus 96 h  |                            | EC50 0.0874 - 0.124 mg/L 48 h<br>EC50 0.17 - 0.21 mg/L 48 h<br>EC50 = 0.14 mg/L 48 h |
| TALC (RESPIRABLE DUST)   |  | LC50> 100 g/L Brachydanio rerio 96 h   |                            |  |
| MODIFIED ALIPHATIC AMINE | EC50 = 495 mg/L 72 h   | LC50 1950-2460 mg/L Pimephales promelas 96 h<br>LC50> 1000 mg/L Poecilia reticulata 96 h<br>LC50>= 100 mg/L Oncorhynchus mykiss 96 h           | EC50 > 10000 mg/L 17 h     | EC50 = 32 mg/L 48 h  |
| FIBROUS GLASS            |  | LC50 5.6 - 7.4 µg/L Pimephales promelas 96 h<br>LC50 9.4 - 9.7 µg/L Pimephales promelas 96 h<br>LC50 24.2 - 48.4 µg/L Lepomis macrochirus 96 h |                            | EC50 = 0.9 µg/L 48 h<br>LC50 = 5 µg/L 96 h<br>LC50 1.4 - 2.3 µg/L 96 h               |
| AMORPHOUS SILICA         | EC50 = 440 mg/L 72 h   | LC50= 5000 mg/L Brachydanio rerio 96 h   |                            | EC50 = 7600 mg/L 48 h  |

## 13. DISPOSAL CONSIDERATIONS

### Waste disposal methods

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

### Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

### DOT

Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

### Proper shipping name

UN3066, PAINT, 8, PGIII, ERG 153

## 15. REGULATORY INFORMATION

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDL       | Complies        |
| EINECS/ELINCS | Does not Comply |
| CHINA         | Complies        |
| ENCS          | Does not Comply |
| KECL          | Complies        |
| PICCS         | Complies        |
| AICS          | Complies        |

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):  
United States of America Federal Regulations

**SARA 313**

**SARA 311/312 Hazardous Categorization**

|                                   |     |
|-----------------------------------|-----|
| Chronic Health Hazard             | yes |
| Acute Health Hazard               | yes |
| Fire Hazard                       | no  |
| Sudden Release of Pressure Hazard | no  |
| Reactive Hazard                   | no  |

| Component     | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| FIBROUS GLASS |                             | X                      |                           |                            |

**CERCLA**

**United States of America State Regulations**

**California Prop. 65**

This product contains the following Proposition 65 chemicals:

| Component     | CAS-No     | California Prop. 65 |
|---------------|------------|---------------------|
| FIBROUS GLASS | 65997-17-3 | Carcinogen          |

**State Right-to-Know**

| Component                | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|--------------------------|---------------|------------|--------------|----------|--------------|
| NONYLPHENOL              | X             |            | X            |          |              |
| TALC (RESPIRABLE DUST)   | X             | X          | X            |          | X            |
| MODIFIED ALIPHATIC AMINE | X             | X          | X            |          |              |
| FIBROUS GLASS            | X             | X          | X            | X        | X            |
| AMORPHOUS SILICA         | X             |            | X            |          |              |

**Other international regulations**

**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification**

D2B Toxic materials  
E Corrosive material



| Component   | NPRI                      |
|-------------|---------------------------|
| NONYLPHENOL | Part 1, Group 1 Substance |

**Legend**

NPRI - National Pollutant Release Inventory

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|                       |
|-----------------------|
| 16. OTHER INFORMATION |
|-----------------------|

Revision Date 15-Apr-2011

Revision Note No information available

HMIS (Hazardous Material Information System)      Health 3\*      Flammability 1      Reactivity 0

**Disclaimer**

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

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**End of MSDS**