1. IDENTIFICATION

Product identifier
Product Code  S239-0000A
Product Name  CHEMTREAD CLEAR

Other means of identification
Common Name  SERIES 239, 239SC OR 286, PART A

Recommended use of the chemical and restrictions on use
Recommended Use  industrial paint.
Uses advised against  Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet
Manufacturer Address  Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Distributor  Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number
Company Phone Number  Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number  800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 1</td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
May be corrosive to metals
Precautionary Statements

Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep only in original container

Response
IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
Absorb spillage to prevent material damage

Storage
Store locked up
Store in corrosive resistant/metal/plastic container with a resistant inner liner
Keep away from children

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information
May be harmful in contact with skin
Toxic to aquatic life with long lasting effects
SEE SAFETY DATA SHEET
Acute Toxicity
0.0487 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPOXY RESIN</td>
<td>28064-14-4</td>
<td>60 - 100%</td>
</tr>
<tr>
<td>BENZYL ALCOHOL</td>
<td>100-51-6</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>NONYLPHENOL</td>
<td>84852-15-3</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>GAMMA-GLYCIDOXYPROPYLTRIMETHOXYSILANE</td>
<td>2530-83-8</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>DEFOAMER</td>
<td>63148-62-9</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>POLY(DIMETHYLSILOXANE)</td>
<td>70914-12-4</td>
<td>0 - 0.1%</td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>7631-86-9</td>
<td>0 - 0.1%</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>0 - 0.1%</td>
</tr>
</tbody>
</table>
**METHYL ALCOHOL**
- 0 - 0.1%

**POLYETHYLENE GLYCOL MONOALLYL ETHER ACETATE**
- 27252-87-5
- 0 - 0.1%

**PROPIETARY SILOXANE**
- 0 - 0.1%

**POLYETHYLENE GLYCOL DIACETATE**
- 27252-83-1
- 0 - 0.1%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

---

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**
If symptoms persist, call a physician.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

**Skin contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

**Inhalation**
Remove to fresh air. Oxygen or artificial respiration if needed.

**Ingestion**
If swallowed, do not induce vomiting. Get medical attention immediately.

**Self-protection of the first aider**
Use personal protective equipment. Avoid contact with eyes, skin and clothing.

**Most important symptoms and effects, both acute and delayed**

**Notes to physician**
Treat symptomatically.

---

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

**Unsuitable extinguishing media**
No information available.

**Specific hazards arising from the chemical**
Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products**
Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon dioxide. Aldehydes.

**Protective equipment and precautions for firefighters**
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

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

**Environmental Precautions**

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
Methods and material for containment and cleaning up

Methods for containment
Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up
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.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Close container after each use. Avoid contact with eyes, skin 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.

Conditions for safe storage, including any incompatibilities

Storage
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products
Incompatible with oxidizing agents. Alkalis. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA 7631-86-9</td>
<td>TWA: 6 mg/m³</td>
<td>TWA: 3000 mg/m³</td>
<td>3000 mg/m³</td>
</tr>
<tr>
<td>TOLUENE 108-88-3</td>
<td>TWA: 20 ppm</td>
<td>TWA: 100 ppm</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 375 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 560 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 200 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling: 300 ppm</td>
<td></td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>TWA: 200 ppm</td>
<td>STEL: 325 mg/m³</td>
<td>6000 ppm</td>
</tr>
<tr>
<td></td>
<td>Skin</td>
<td>STEL: 250 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures
Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH’s Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection
Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection
Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA 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

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>72 °C / 162 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.17457 g/cm³</td>
<td>g/cm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in cold water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>2600 centipoises</td>
<td></td>
</tr>
<tr>
<td>Other Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>9.77417 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds (VOC)</td>
<td>.065 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total volatiles weight percent</td>
<td>.6580 %</td>
<td></td>
</tr>
<tr>
<td>Total volatiles volume percent</td>
<td>.7496 %</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks.
11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Eye contact
Severely irritating to eyes. May cause irreversible damage to eyes.

Skin contact
Irritating to skin.

Ingestion
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>100-51-6</td>
<td>= 1230 mg/kg (Rat)</td>
<td>= 2 g/kg (Rabbit)</td>
</tr>
<tr>
<td>NONYLPHENOL</td>
<td>84852-15-3</td>
<td>= 1300 mg/kg (Rat)</td>
<td>= 2031 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>GAMMA-GLYCIDOXYPROPYLTRI METHOXYSILANE</td>
<td>2530-83-8</td>
<td>= 22600 µL/kg (Rat)</td>
<td>= 3970 µL/kg (Rabbit)</td>
</tr>
<tr>
<td>DEFOAMER</td>
<td>63148-62-9</td>
<td>&gt; 24 g/kg (Rat) &gt; 17 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>7631-86-9</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>= 2600 mg/kg (Rat)</td>
<td>= 12000 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td></td>
<td>= 6200 mg/kg (Rat)</td>
<td>= 15800 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

Information on Toxicological Effects

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity
May be corrosive to metals.

Chronic Toxicity
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.

Sensitization
May cause sensitization of susceptible persons.

Mutagenicity
No information available.

Carcinogenicity
There are no known carcinogenic chemicals in this product.

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA</td>
<td>7631-86-9</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reproductive Effects
Suspected of damaging fertility or the unborn child.

STOT - Single Exposure
No information available.

STOT - Repeated Exposure
Causes damage to organs through prolonged or repeated exposure

Target Organ Effects
Skin, Eyes, respiratory system, liver, kidney.

Aspiration Hazard
Based on product level data, this product does not meet the requirement to be classified as an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.
12. ECOLOGICAL INFORMATION

## Ecotoxicity

Toxic to aquatic life with long lasting effects

0.1875 \% of the mixture consists of components(s) of unknown hazards to the aquatic environment

### Component

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>$35: 3$ h $\text{Anabaena variabilis mg/L EC50}$</td>
<td>$460: 96$ h $\text{Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static}$</td>
<td>$23: 48$ h $\text{water flea mg/L EC50}$</td>
</tr>
<tr>
<td>NONYLPHENOL</td>
<td>$0.36 - 0.48: 96$ h $\text{Pseudokirchneriella subcapitata mg/L EC50 static 0.16 - 0.72: 72 h}$</td>
<td>$0.135: 96$ h $\text{Pimephales promelas mg/L LC50 flow-through 0.1351: 96 h Lepomis macrochirus mg/L LC50 flow-through}$</td>
<td>$0.14: 48$ h $\text{Daphnia magna mg/L EC50}$</td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>$440: 72$ h $\text{Pseudokirchneriella subcapitata mg/L EC50}$</td>
<td>$5000: 96$ h $\text{Brachydaniario rerio mg/L LC50 static}$</td>
<td>$7600: 48$ h $\text{Ceriodaphnia dubia mg/L EC50}$</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>$433: 96$ h $\text{Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h}$ $\text{Pseudokirchneriella subcapitata mg/L EC50 static}$</td>
<td>$15.22 - 19.05: 96$ h $\text{Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.1 - 17.96: 96 h Oncorhynchus mykiss mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static}$</td>
<td>$5.46 - 9.83: 48$ h $\text{Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50}$</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>$28200: 96$ h $\text{Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mg/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through}$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Mobility in Environmental Media

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>$1.1$</td>
</tr>
<tr>
<td>NONYLPHENOL</td>
<td>$5.4$</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>$2.65$</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>$-0.77$</td>
</tr>
</tbody>
</table>

### Other Adverse Effects

No information available.
13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**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 to an approved waste handling site for recycling or disposal.

<table>
<thead>
<tr>
<th>Component</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>U220</td>
<td>Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td></td>
<td>Included in waste stream: F039</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>Toxic waste</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>waste number F025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste description:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAWAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Ignitable</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>Toxic</td>
</tr>
<tr>
<td></td>
<td>Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

**DOT**
Proper Shipping Name: paint in oil
Not regulated

**IATA**
Proper Shipping Name: Not regulated

**Additional information**
Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

**International Inventories**
- **TSCA**: Complies
- **DSL/NDSL**: Complies
- **EINECS/ELINCS**: Does not comply
ENCS - Does not comply
IECSC - Complies
KECL - Complies
PICCS - Complies
AICS - Does not comply

TSCLA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
Component: TOLUENE, METHYL ALCOHOL

United States of America

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

<table>
<thead>
<tr>
<th>Component</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONYLPHENOL</td>
<td>1.0</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>1.0</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous
Categorization
Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: No
Sudden Release of Pressure Hazard: No
 Reactive Hazard: No

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>1000 lb</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>1000 lb 1 lb</td>
<td>RQ 1000 lb final RQ</td>
<td></td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>5000 lb</td>
<td>RQ 0.454 kg final RQ</td>
<td></td>
</tr>
</tbody>
</table>

United States of America

California Prop. 65
This product does not contain any Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Component</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE 108-88-3</td>
<td>Developmental</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>Developmental</td>
</tr>
</tbody>
</table>
California SCAQMD Rule 443
Contains Photochemically Reactive Solvent

State Right-to-Know

<table>
<thead>
<tr>
<th>Component</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>100-51-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>7631-86-9</td>
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<tr>
<td>TOLUENE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>108-88-3</td>
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<td></td>
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<tr>
<td>METHYL ALCOHOL</td>
<td>X</td>
<td>X</td>
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</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health 3</td>
<td>Flammability 0</td>
<td>Instability 1</td>
<td>Physical hazard *</td>
</tr>
<tr>
<td>Health 3*</td>
<td>Flammability 0</td>
<td>Reactivity 1</td>
<td></td>
</tr>
</tbody>
</table>

Prepared By: Tnemec Regulatory Dept: 816-474-3400
Revision Date: 22-Sep-2015
Revision Summary: 9 4 5 7 10 8 11 14 15 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 or 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 SDS
1. IDENTIFICATION

Product identifier
Product Code: S239-0286B
Product Name: S239/S286 CONVERTER

Other means of identification
Common Name: SERIES 239/286, PART B
UN/ID no.: 3066

Recommended use of the chemical and restrictions on use
Recommended Use: industrial paint.
Uses advised against: Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet
Manufacturer Address: Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Distributor: Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203 Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number
Company Phone Number: Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number: 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category C</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 1</td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

Danger
Hazard statements
Harmful if swallowed
Harmful if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
May cause damage to organs
Causes damage to organs through prolonged or repeated exposure
May be corrosive to metals

Appearance amber  Physical state liquid  Odor amine

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Keep only in original container

Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting
Absorb spillage to prevent material damage

Storage
Store locked up
Store in corrosive resistant/metal/plastic container with a resistant inner liner
Keep away from children

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other information
May be harmful in contact with skin
Toxic to aquatic life with long lasting effects
Acute Toxicity 39.40108 % of the mixture consists of ingredient(s) of unknown toxicity.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>100-51-6</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>MODIFIED ALIPHATIC AMINE</td>
<td>-</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>POLYOXYPROPYLENETERIAMINE</td>
<td>39423-51-3</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>MODIFIED CYCLOALIPHATIC POLYAMINE</td>
<td>1761-71-3</td>
<td>10 - 30%</td>
</tr>
<tr>
<td>MODIFIED CYCLOALIPHATIC POLYAMINE</td>
<td>-</td>
<td>1 - 10%</td>
</tr>
<tr>
<td>NONYLPHENOL</td>
<td>84852-15-3</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice
If symptoms persist, call a physician.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation
Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion
If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider
Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide. Dry powder. Dry chemical. alcohol-resistant foam.

Unsuitable extinguishing media
No information available.

Specific hazards arising from the chemical
Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Hazardous combustion products

Protective equipment and precautions for firefighters
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

Personal precautions, protective equipment and emergency procedures
Personal precautions

Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment

Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Close container after each use. Avoid contact with eyes, skin 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.

Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Appropriate engineering controls

Engineering measures

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH’s Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection
Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA 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

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td>Odor</td>
</tr>
<tr>
<td>Appearance</td>
<td></td>
<td>Odor threshold</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks</td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>72 °C / 162 °F</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
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<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
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<td>No data available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>N/A</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
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<tr>
<td>Specific gravity</td>
<td>1.02672 g/cm3</td>
<td>g/cm3</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in cold water</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>704 centipoises</td>
<td>No data available</td>
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<tr>
<td>Other Information</td>
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<td></td>
</tr>
<tr>
<td>Density</td>
<td>8.54389 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds (VOC) content</td>
<td>.232 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>Total volatiles weight percent</td>
<td>2.7140 %</td>
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</tr>
<tr>
<td>Total volatiles volume percent</td>
<td>2.6649 %</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Incompatible with oxidizing agents, Hydroxyl Compounds, Acids, sodium hypochlorite, Zinc, copper
Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

**Inhalation**
May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

**Eye contact**
Severely irritating to eyes. May cause irreversible damage to eyes.

**Skin contact**
Contact causes severe skin irritation and possible burns. May cause sensitization by skin contact.

**Ingestion**
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral (mg/kg)</th>
<th>LD50 Dermal (g/kg)</th>
<th>LC50 Inhalation (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td>1230 (Rat)</td>
<td>2 (Rabbit)</td>
<td>8.8 (Rat) 4h</td>
</tr>
<tr>
<td>MODIFIED CYCLOALIPHATIC POLYAMINE 1761-71-3</td>
<td>1000 (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NONYLPHENOL 84852-15-3</td>
<td>580 (Rat)</td>
<td>2031 (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

**Symptoms**
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity**
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.

**Sensitization**
May cause sensitization of susceptible persons.

**Mutagenicity**
No information available.

**Carcinogenicity**
There are no known carcinogenic chemicals in this product.

**Reproductive effects**
Suspected of damaging fertility or the unborn child.

**STOT - single exposure**
Skin, Eyes, Central Nervous System (CNS)

**STOT - repeated exposure**
Cytotoxicity to organs through prolonged or repeated exposure, liver, kidney, Respiratory system, Central Nervous System (CNS)

**Aspiration hazard**
No information available.

**Acute Toxicity**
39.40108 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Toxic to aquatic life with long lasting effects

39.40108 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td>35: 3h Anabaena variabilis mg/L EC50</td>
<td>10: 96h Lepomis macrochirus mg/L LC50 static 460: 96h Pimephales promelas mg/L LC50 static</td>
<td>23: 48h water flea mg/L EC50</td>
</tr>
</tbody>
</table>
### Persistence and degradability
No information available.

### Bioaccumulation
No information available.

### Mobility in Environmental Media

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td>1.1</td>
</tr>
<tr>
<td>MODIFIED CYCLOALIPHATIC POLYAMINE 1761-71-3</td>
<td>2.03</td>
</tr>
<tr>
<td>NONYLPHENOL 84852-15-3</td>
<td>5.4</td>
</tr>
</tbody>
</table>

### Other Adverse Effects
No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**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 to an approved waste handling site for recycling or disposal.

### 14. TRANSPORT INFORMATION

**DOT**

<table>
<thead>
<tr>
<th>UN/ID no.</th>
<th>3066</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>paint</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>8</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>Emergency Response Guide Number</td>
<td>153</td>
</tr>
</tbody>
</table>

**IATA**

<table>
<thead>
<tr>
<th>UN/ID no.</th>
<th>3066</th>
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<tbody>
<tr>
<td>Proper Shipping Name</td>
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<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>ERG Code</td>
<td>856</td>
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</tbody>
</table>

**Additional information**
Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Complies/Does not comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
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<td>KECL</td>
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<tr>
<td>PICCS</td>
<td>Does not comply</td>
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<td>AICS</td>
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</tr>
</tbody>
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United States of America

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<tbody>
<tr>
<td>NONYLPHENOL - 84852-15-3</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous

Categorization

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

<table>
<thead>
<tr>
<th>Component</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>100-51-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
S239-0286B S239/S286 CONVERTER

HMIS (Hazardous Material Information System)

Prepared By: Tnemec Regulatory Dept: 816-474-3400
Revision Date: 28-Jul-2015
Revision Summary: 28-Jul-2015

Health 3*  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 nor 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
Safety Data Sheet

1. IDENTIFICATION

Product identifier
Product Code S211-0214
Product Name FUMED SILICA S C MORTAR

Other means of identification
Common Name SERIES 211-214

Recommended use of the chemical and restrictions on use
Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet
Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number
Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Harmful if swallowed
Harmful if inhaled
Causes serious eye irritation
May cause cancer
Causes damage to organs
Causes damage to organs through prolonged or repeated exposure
Precautionary Statements

Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray

Response
IF exposed: Call a POISON CENTER or doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage
Store locked up
Keep away from children

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information
Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).
Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs
SEE SAFETY DATA SHEET

Acute Toxicity
0.000102 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)</td>
<td>14808-60-7</td>
<td>30 - 60%</td>
</tr>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)</td>
<td>14808-60-7</td>
<td>30 - 60%</td>
</tr>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT</td>
<td>68131-74-8</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice
If symptoms persist, call a physician.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact  Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation  Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion  If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider  Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician  Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media  Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media  No information available.

Specific hazards arising from the chemical  Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Hazardous combustion products  Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Protective equipment and precautions for firefighters  As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions  Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions  Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment  Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up  Shovel or sweep up.

7. HANDLING AND STORAGE

Precautions for safe handling
Handling
Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. Tightly fitting safety goggles. Wear protective gloves/clothing. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities
Storage
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products
Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRAYSTALLINE SILICA (QUARTZ) 14808-60-7</td>
<td>TWA: 0.025 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>CRAYSTALLINE SILICA (QUARTZ) 14808-60-7</td>
<td>TWA: 0.025 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT 68131-74-8</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>100 mg/m³ 10 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH’s Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection
Use chemical resistant splash type goggles.

Skin and body protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection
Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA 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

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>powder</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>light grey</td>
<td>odorless</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor threshold</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>72 °C / 162 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Evaporation rate: No data available
Flammability (solid, gas): Not applicable
Flammability Limit in Air:
   Upper flammability limit: N/A
   Lower flammability limit: N/A
Vapor pressure: No data available
Vapor density: No data available
Specific gravity: 2.34955 g/cm³
Water solubility: Insoluble in cold water
Solubility in other solvents: No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Kinematic viscosity: No data available
Dynamic viscosity: No data available

Other Information:
Density: 19.59523 lbs/gal
Volatile organic compounds (VOC) content: 0 lbs/gal
Total volatiles weight percent: 0 %
Total volatiles volume percent: 0 %

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: None under normal processing.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Incompatible with oxidizing agents


11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:

   Inhalation: Harmful if inhaled. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
   Eye contact: Severely irritating to eyes.
   Skin contact: Irritating to skin.
   Ingestion: Harmful if swallowed.

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRYSTALLINE SILICA (QUARTZ)</td>
<td>500 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14808-60-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 5 / 8
CRYS[T LINELII SILICA (QUARTZ) 
14808-60-7 = 500 mg/kg ( Rat )
COAL FIRED FLY ASH 
BI-PRODUCT 
68131-74-8 > 2000 mg/kg ( Rat )

Information on toxicological effects

Symptoms
Respiratory disorders. Eye Damage.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity
Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).

Sensitization
No information available.

Mutagenicity
No information available.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
</table>
| CRYS[T LINELII SILICA (QUARTZ) 
14808-60-7 | A2 | Group 1 | Known | X |
| CRYS[T LINELII SILICA (QUARTZ) 
14808-60-7 | A2 | Group 1 | Known | X |
| COAL FIRED FLY ASH 
BI-PRODUCT 
68131-74-8 | Group 1 | Known |

Reproductive effects
No information available.

STOT - single exposure
Eyes, Respiratory system

STOT - repeated exposure
Causes damage to organs through prolonged or repeated exposure
blood, Central nervous system, Central Vascular System (CVS), Eyes, kidney, liver, Lungs, Nasal Cavities, prostate, respiratory system, Skin.

Aspiration hazard
Not applicable.

Acute Toxicity
0.000102 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity
98.08407 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
</table>
| COAL FIRED FLY ASH 
BI-PRODUCT 
68131-74-8 | | | 140 - 2000: 24 h Daphnia magna mg/L EC50 |

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility in Environmental Media

Other Adverse Effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
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 to an approved waste handling site for recycling or disposal.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAWAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT</td>
<td>Toxic</td>
</tr>
<tr>
<td>68131-74-8</td>
<td>Corrosive</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name: SILICA, N.O.I.-20-P.C.F., GREATER (ITEM 176370, SUB 3)

IATA

Proper Shipping Name: Not regulated

Additional information: Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA: Complies
DSL/NDSL: Complies
EINECS/ELINCS: Complies
ENCS: Does not comply
IECSC: Complies
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):

Component: COAL FIRED FLY ASH BI-PRODUCT

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Component</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8</td>
<td>1.0 0.1</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous

Categorization

Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT 68131-74-8</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA

United States of America

California Prop. 65
WARNING! This product contains a chemical known in the State of California to cause cancer

<table>
<thead>
<tr>
<th>Component</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRYSSTALINE SILICA (QUARTZ) - 14808-60-7</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>CRYSSTALINE SILICA (QUARTZ) - 14808-60-7</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

California SCAQMD Rule 443
Does Not Contain Photochemically Reactive Solvent

State Right-to-Know

<table>
<thead>
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<th>Massachusetts</th>
<th>Pennsylvania</th>
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<tbody>
<tr>
<td>CRYSSTALINE SILICA (QUARTZ) 14808-60-7</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>COAL FIRED FLY ASH BI-PRODUCT 68131-74-8</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA
Health 1
Flammability 0
Instability 0
Physical hazard *

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

Prepared By: Tnemec Regulatory Dept: 816-474-3400
Revision Date: 27-Jan-2015
Revision Summary: 9 4 5 7 10 8 11 14

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End of MSDS