



# Material Safety Data Sheet

Preparation Date: 30-Dec-2009

Revision Date: 29-Dec-2009

Revision Number: 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code** S239-0000A  
**Trade Name** CHEMTREAD CLEAR  
**Contact Manufacturer** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372  
**Emergency Telephone Number** 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### DANGER!

CAUSES SKIN AND EYE BURNS.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
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.

#### 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

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** No information available

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

**Potential Environmental Effects** See Section 12 for additional Ecological information

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous Components

| Component      | CAS-No     | Weight % |
|----------------|------------|----------|
| EPOXY RESIN    | 28064-14-4 | 60 - 100 |
| BENZYL ALCOHOL | 100-51-6   | 6.1648   |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

|             |            |       |
|-------------|------------|-------|
| NONYLPHENOL | 84852-15-3 | 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. Nitric acid, nitrosamine. Phenolics. Silicon.  |

#### 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.

#### 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

|                                  |   |
|----------------------------------|---|
| <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

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas

#### Personal Protective Equipment

##### Skin Protection

Lightweight protective clothing, Apron, Impervious gloves

##### Eye/face Protection

If splashes are likely to occur, wear Goggles.

##### 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           | Not applicable               |
| Boiling Point/Range   | No information available.0.0 |
| Upper Exposure Limits | No information available     |
| Lower Exposure Limits | No information available     |
| Evaporation Rate      | No information available     |
| Vapour Pressure       | No information available     |
| Vapour Density        | No information available     |
| Specific Gravity      | 1.17457                      |
| Density               | 9.77417                      |
| VOC Content (lbs/gal) | .064                         |
| % Volatile by Weight  | .6490                        |
| % Volatile by Volume  | .7364                        |

## 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 (methanol). |
| <b>Incompatible Products</b> | Strong oxidizing agents. Bases. Acids. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides. Amines. | <b>Possibility of Hazardous Reactions</b> | None under normal processing  |

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

| Component      | LD50 Oral          | LD50 Dermal           | LC50 Inhalation      |
|----------------|--------------------|-----------------------|----------------------|
| BENZYL ALCOHOL | 1230 mg/kg ( Rat ) | 2000 mg/kg ( Rabbit ) | 8.8 mg/L ( Rat ) 4 h |
| NONYLPHENOL    | 580 mg/kg ( Rat )  | 2031 mg/kg ( Rabbit ) |                      |

#### Irritation

No information available

**Corrosivity** No information available  
**Sensitization** No information available

**Chronic Toxicity**

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

**Mutagenic Effects** No information available  
**Reproductive Effects** No information available  
**Developmental Effects** No information available  
**Teratogenicity** No information available  
**Target Organ Effects** No information available  
**Endocrine Disruptor Information** 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      | Freshwater Algae      | Freshwater Fish  | Microtox  | Water Flea                                   |
|----------------|-----------------------|--|---|--|
| BENZYL ALCOHOL | EC50 = 35 mg/L 3 h    | LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h | EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min | EC50 = 23 mg/L 48 h                          |
| NONYLPHENOL    | EC50 = 0.41 mg/L 96 h | LC50= 0.135 mg/L Pimephales promelas 96 h                                      |   | EC50 = 0.14 mg/L 48 h EC50 = 0.140 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**

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

**U.S. Federal Regulations**

**SARA 313**

**SARA 311/312 Hazardous Categorization**

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

**CERCLA**

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

| Component      | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|----------------|---------------|------------|--------------|----------|--------------|
| BENZYL ALCOHOL | X             |            | X            |          |              |
| NONYLPHENOL    | X             |            | X            |          |              |

**Other International Regulations**

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D2B Toxic materials  
E Corrosive material



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

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**

Revision Date: 29-Dec-2009

Revision Summary: No information available

HMIS Health 0 Flammability 0 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 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 MSDS**



# Material Safety Data Sheet

Preparation Date: 04-Jan-2010

Revision Date: 29-Dec-2009

Revision Number: 0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Code** S239-0286B  
**Trade Name** S239/S286 CONVERTER  
**Contact Manufacturer** Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372  
**Emergency Telephone Number** 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

#### DANGER!

CAUSES SKIN AND EYE BURNS.  
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.  
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.

#### 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

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** No information available

**Interactions with Other Chemicals** Use of alcoholic beverages may enhance toxic effects.

**Potential Environmental Effects** See Section 12 for additional Ecological information

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous Components

| Component                | CAS-No   | Weight % |
|--------------------------|----------|----------|
| BENZYL ALCOHOL           | 100-51-6 | 31.1117  |
| MODIFIED ALIPHATIC AMINE |          | 10 - 30  |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

|                          |            |         |
|--------------------------|------------|---------|
| CYCLOHEXANAMINE          | 1761-71-3  | 10 - 30 |
| POLYOXYPROPYLENETRIAMINE | 39423-51-3 | 10 - 30 |
| NONYLPHENOL              | 84852-15-3 | 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. Nitric acid, nitrosamine. Phenolics.   |

#### 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.

#### Protective Equipment and Precautions for Firefighters

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### 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

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas

#### Personal Protective Equipment

##### Skin Protection

Lightweight protective clothing, Apron, Impervious gloves

##### Eye/face Protection

If splashes are likely to occur, wear Goggles.

##### 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

Not applicable

#### Method

Pensky Martens - Closed Cup

#### Boiling Point/Range

No information available

#### Upper Exposure Limits

No information available

#### Lower Exposure Limits

No information available

#### Evaporation Rate

No information available

#### Vapour Pressure

No information available

#### Vapour Density

No information available

#### Specific Gravity

1.01272

#### Density

8.42732

#### VOC Content (lbs/gal)

.262

#### % Volatile by Weight

3.1110

#### % Volatile by Volume

3.0136

## 10. STABILITY AND REACTIVITY

#### Chemical stability

Stable.

#### Conditions to Avoid

Heat, flames and sparks. Epoxy constituents.

#### Incompatible Products

Strong oxidizing agents. Bases. Acids. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides.

#### Possibility of Hazardous Reactions

None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

| Component       | LD50 Oral          | LD50 Dermal           | LC50 Inhalation      |
|-----------------|--------------------|-----------------------|----------------------|
| BENZYL ALCOHOL  | 1230 mg/kg ( Rat ) | 2000 mg/kg ( Rabbit ) | 8.8 mg/L ( Rat ) 4 h |
| CYCLOHEXANAMINE | 1000 mg/kg ( Rat ) |                       |                      |
| NONYLPHENOL     | 580 mg/kg ( Rat )  | 2031 mg/kg ( Rabbit ) |                      |

#### Irritation

No information available

**Corrosivity** No information available  
**Sensitization** No information available

**Chronic Toxicity**

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

**Mutagenic Effects** No information available  
**Reproductive Effects** No information available  
**Developmental Effects** No information available  
**Teratogenicity** No information available  
**Target Organ Effects** No information available  
**Endocrine Disruptor Information** 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       | Freshwater Algae      | Freshwater Fish  | Microtox  | Water Flea                                   |
|-----------------|-----------------------|--|---|--|
| BENZYL ALCOHOL  | EC50 = 35 mg/L 3 h    | LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h | EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min | EC50 = 23 mg/L 48 h                          |
| CYCLOHEXANAMINE |                       | LC50 46 - 100 mg/L Leuciscus idus 96 h   |   |  |
| NONYLPHENOL     | EC50 = 0.41 mg/L 96 h | LC50= 0.135 mg/L Pimephales promelas 96 h                                      |   | EC50 = 0.14 mg/L 48 h EC50 = 0.140 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.

## 15. REGULATORY INFORMATION

**International Inventories**

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

**U.S. Federal Regulations**

**SARA 313**

**SARA 311/312 Hazardous Categorization**

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

**CERCLA**

**U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

| Component      | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|----------------|---------------|------------|--------------|----------|--------------|
| BENZYL ALCOHOL | X             |            | X            |          |              |
| NONYLPHENOL    | X             |            | X            |          |              |

**Other International Regulations**

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

D2B Toxic materials  
E Corrosive material



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

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**

Revision Date: 29-Dec-2009

Revision Summary: No information available

HMIS Health 3 Flammability 0 Reactivity 1

**Disclaimer**

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**End of MSDS**