1. IDENTIFICATION

Product identifier
Product Code F151-1051A
Product Name ELASTO-GRIP FC

Other means of identification
Common Name SERIES 151, PART A
Synonyms None

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 816-474-3400
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>Serious eye damage/eye irritation</td>
<td>2A</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>1</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>1A</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>2</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>1</td>
</tr>
</tbody>
</table>

Label elements

WARNING

Hazard statements
Causes serious eye irritation
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
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
- 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

**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
- IF eye irritation persists: Get medical advice/attention
- IF ON SKIN: Wash with plenty of soap and water
- IF skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse

**Storage**
- Store locked up
- Keep away from children

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

**Hazards not otherwise classified (HNOC)**
- Causes mild skin irritation
- Toxic to aquatic life with long lasting effects
- 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
- Contains ethylene glycol monobutyl ether which may cause blood damage based on animal data.

SEE SAFETY DATA SHEET

Acute Toxicity
- 30.11817 % of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPOXY RESIN</td>
<td>-</td>
<td>10 - &lt;30%</td>
</tr>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td>-</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>124-17-4</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>ACETATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BENZYL ALCOHOL</td>
<td>100-51-6</td>
<td>1 - &lt;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 thoroughly with plenty of water 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. Call a physician immediately.

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. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

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

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td>TWA: 50 ppm</td>
<td>TWA: 100 ppm</td>
<td>TWA: 360 mg/m³</td>
</tr>
<tr>
<td></td>
<td>STEL: 100 ppm</td>
<td>STEL: 150 ppm</td>
<td>STEL: 540 mg/m³</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
Safety glasses with side-shields 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>opaque</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
<td>No information available</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>
</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**
Acids, Alkaline, Amines, Strong oxidizing agents

**Hazardous decomposition products**

### 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

<table>
<thead>
<tr>
<th>Route</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Contact with eyes may cause irritation.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>May cause irritation. May cause sensitization by skin contact.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>
### Chemical names and toxicological effects

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal (Rabbit)</th>
<th>LC50 Inhalation (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td>5000 mg/kg</td>
<td>13 g/kg</td>
<td>&gt; 7559 ppm</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE 124-17-4</td>
<td>6500 mg/kg</td>
<td>14500 mg/kg</td>
<td>72500 mg/m³</td>
</tr>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td>1230 mg/kg</td>
<td>2 g/kg</td>
<td>8.8 mg/L</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**
Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure). Contains ethylene glycol monobutyl ether which may cause blood damage based on animal data. Skin sensitizer. Substances known to be mutagenic to man. Substances known to impair fertility.

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

**Mutagenicity**
May cause genetic defects.

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

**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. Blood, Central nervous system, Central Vascular System (CVS), Eyes, hematopoietic system, kidney, liver, Lungs, respiratory system. Skin.

**Aspiration hazard**
No information available.

**Acute Toxicity**
30.11817 % of the mixture consists of ingredient(s) of unknown toxicity.

### 12. ECOLOGICAL INFORMATION

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

69.83527 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td></td>
<td>20.8: 96 h Pimephales promelas g/L LC50 static 4600 - 10000: 96 h Leuciscus idus mg/L LC50 static</td>
<td>23300: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE 124-17-4</td>
<td>50 - 70: 96 h Brachydanio rerio mg/L LC50 static 77: 96 h Pimephales promelas mg/L LC50 static</td>
<td>665: 48 h Daphnia magna mg/L LC50</td>
<td></td>
</tr>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td>35: 3 h Anabaena variabilis mg/L EC50</td>
<td>460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>23: 48 h 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>Chemical name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td>-0.437</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE 124-17-4</td>
<td>1.77</td>
</tr>
</tbody>
</table>
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
Proper Shipping Name
paint, water base freezable NOT REGULATED

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>Compliance Status</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>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does Not Comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

TSCA - 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):

Chemical name: DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE

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>Chemical name</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE - 124-17-4</td>
<td>1.0</td>
</tr>
</tbody>
</table>
SARA 311/312 Hazardous

Categorization

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

California Prop. 65

None of the ingredients are listed with California Proposition 65.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA - 7631-86-9</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY SOLVENT</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE 124-17-4</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>BENZYL ALCOHOL 100-51-6</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Category</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HMIS (Hazardous Material Information System)

Prepared By

Tnemec Regulatory Dept: 816-474-3400

Revision Date

24-Oct-2018

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 SDS
1. IDENTIFICATION

Product identifier
Product Code F151-1051B
Product Name ELASTO-GRIP FC GREEN CONVERTER

Other means of identification
Common Name SERIES 151-1051, PART B
Synonyms None

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 816-474-3400
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)

| Serious eye damage/eye irritation | Category 1 |

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Causes serious eye damage

Appearance green Physical state liquid Odor Slight

Precautionary Statements
Prevention
Wear protective gloves/protective clothing/eye protection/face protection

Response
Get medical advice/attention if you feel unwell
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

Storage
Keep away from children

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

Hazards not otherwise classified (HNOC)
Other information
Causes mild skin irritation
Harmful to aquatic life with long lasting effects
Acute Toxicity 14.11162 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPOXY POLYMER</td>
<td>155240-10-1</td>
<td>10 - &lt;30%</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE</td>
<td>124-17-4</td>
<td>1 - &lt;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 thoroughly with plenty of water for at least 15 minutes. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Skin contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

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. Foam. Dry chemical.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

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

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: Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation. Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products: Strong oxidizing agents. Acids. Alkalis. Cleaning solutions such as Chromerge and Aqua Regia.

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></td>
</tr>
<tr>
<td>Appearance</td>
<td>green</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slight</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>100 °C / 212.0 °F</td>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>.8</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.00928</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>No data available</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>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Other Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>8.41737 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds (VOC)</td>
<td>1.18846 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total volatiles weight percent</td>
<td>85.14 %</td>
<td></td>
</tr>
<tr>
<td>Total volatiles volume percent</td>
<td>86.04 %</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

**10. STABILITY AND REACTIVITY**

**Reactivity**
Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks. Epoxy constituents.

Incompatible materials
Strong oxidizing agents, Acids, Alkalis, Cleaning solutions such as Chromerge and Aqua Regia

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  Causes serious eye damage.
Skin contact  Irritating to skin.
Ingestion  Harmful if swallowed.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL</td>
<td>= 6500 mg/kg (Rat)</td>
<td>= 14500 mg/kg (Rabbit)</td>
<td>= 72500 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>MONOBUTYL ETHER ACETATE 124-17-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

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  No information available.
Mutagenicity  No information available.
Carcinogenicity  There are no known carcinogenic chemicals in this product.
Reproductive effects  No information available.
STOT - single exposure  No information available
STOT - repeated exposure  No information available
Aspiration hazard  No information available.

Acute Toxicity  14.11162 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity  Harmful to aquatic life with long lasting effects.
14.29022 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE</td>
<td></td>
<td>50 - 70: 96 h Brachydanio rerio mg/L LC50 static</td>
<td>665: 48 h Daphnia magna mg/L LC50</td>
</tr>
<tr>
<td>124-17-4</td>
<td></td>
<td>77: 96 h Pimephales promelas mg/L LC50 static</td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

**Mobility in Environmental Media**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE</td>
<td>1.77</td>
</tr>
<tr>
<td>124-17-4</td>
<td></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**

**Proper Shipping Name**
paint, water base freezable Not regulated

**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></th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
<td>Does Not Comply</td>
</tr>
</tbody>
</table>

**TSCA** - 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
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

**Chemical name**

DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE

**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>Chemical name</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE - 124-17-4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazardous**

**Categorization**

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

**California Prop. 65**

None of the ingredients are listed with California Proposition 65.

**California SCAQMD Rule 443**

Contains Photochemically Reactive Solvent

**State Right-to-Know**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE - 124-17-4</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

**NFPA**

- Health: 3
- Flammability: 0
- Instability: 1
- Physical hazard: -

**HMIS (Hazardous Material Information System)**

- Health: 3
- Flammability: 0
- Reactivity: 1

**Prepared By**

Tnemec Regulatory Dept: 816-474-3400

**Revision Date**

05-Mar-2018

**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 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 SDS