1. IDENTIFICATION

Product identifier
Product Code: 1078V-10MTA
Product Name: LOW VOC FLUORONAR METALLIC DAR

Other means of identification
Common Name: SERIES 1078V, PART A
UN/ID no.: 1263
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
Emergency telephone number: Tnemec Regulatory Dept: 816-474-3400
Distributor: Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3
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>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Causes serious eye irritation
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
May cause respiratory irritation. May cause drowsiness or dizziness
Flammable liquid and vapor
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
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
Use explosion-proof electrical/ventilating/lighting/equipment

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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
In case of fire: Use CO2, dry chemical, or foam for extinction

Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
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
37.42339941 % 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>P-CHLOROBENZOTRIFLUORIDE</td>
<td>98-56-6</td>
<td>30 - &lt;60%</td>
</tr>
<tr>
<td>FLUOROPOLYMER</td>
<td>-</td>
<td>30 - &lt;60%</td>
</tr>
<tr>
<td>tert-BUTYL ACETATE</td>
<td>540-88-5</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>MICA (RESPIRABLE DUST)</td>
<td>12001-26-2</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>IRON</td>
<td>7439-89-6</td>
<td>1 - &lt;10%</td>
</tr>
<tr>
<td>ETHYL 3-ETHOXYPROPIONATE</td>
<td>763-69-9</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>
</tbody>
</table>
**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 eye irritation persists, consult a specialist.

**Skin contact**
Wash off immediately with soap and plenty of water. 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. Foam. Dry chemical.

**Unsuitable extinguishing media**
Water.

**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. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

**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>P-CHLOROBENZOTRIFLUORIDE 98-86-6</td>
<td>TWA: 2.5 mg/m³</td>
<td>-</td>
<td>250 mg/m³</td>
</tr>
<tr>
<td>tert-BUTYL ACETATE 540-88-5</td>
<td>TWA: 50 ppm STEL: 150 ppm</td>
<td>TWA: 200 ppm TWA: 950 mg/m³</td>
<td>1500 ppm</td>
</tr>
<tr>
<td>MICA (RESPIRABLE DUST) 12001-26-2</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>1500 mg/m³</td>
</tr>
<tr>
<td>CI PIGMENT BLACK 29 68187-50-8</td>
<td>TWA: 0.02 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CARBON BLACK, AMORPHOUS 1333-86-4</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3.5 mg/m³</td>
<td>1750 mg/m³</td>
</tr>
<tr>
<td>NICKEL 7440-02-0</td>
<td>TWA: 1.5 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>COBALT OXIDE 1308-06-1</td>
<td>TWA: 0.02 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AMORPHOUS SILICA 7631-86-9</td>
<td>-</td>
<td>TWA: 6 mg/m³</td>
<td>3000 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**
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>opaque</td>
<td>Odor Slight</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor threshold No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<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>98 °C / 208.0 °F</td>
<td>Pensky Martens - Closed Cup</td>
</tr>
<tr>
<td>Flash point</td>
<td>35 °C / 95.0 °F</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 data available</td>
<td>Not applicable</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>.8</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>1.3415</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>2100 centipoises</td>
<td>approx</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>2100 centipoises</td>
<td></td>
</tr>
<tr>
<td>Other Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>11.18813 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>Volatile organic compounds (VOC)</td>
<td>1.15337 lbs/gal</td>
<td></td>
</tr>
<tr>
<td>content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total volatiles weight percent</td>
<td>52.51 %</td>
<td></td>
</tr>
<tr>
<td>Total volatiles volume percent</td>
<td>58.57 %</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information 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. Contact with water liberates highly flammable gases. Reacts with air to form peroxides.

Incompatible materials
Strong oxidizing agents, Bases, Acids, Alkaline, caustic

Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</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>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Irritating to skin. May cause sensitization by skin contact.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50 Oral (mg/kg)</th>
<th>LD50 Dermal (mg/kg)</th>
<th>LC50 Inhalation (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-Chlorobenzotrifluoride</td>
<td>98-56-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tert-Butyl Acetate</td>
<td>540-88-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron 7439-89-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl 3-Ethoxypropionate</td>
<td>763-69-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether Acetate</td>
<td>123-17-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black, Amorphous</td>
<td>1333-86-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bis (Pentamethylpiperidyl) Sebacate 41556-26-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel 7440-02-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cobalt Oxide 1308-06-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amorphous Silica 7631-86-9</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.

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

Sensitization
No information available.

Mutagenicity
May cause genetic defects.

Carcinogenicity
The table below indicates whether each agency has listed any ingredient as a carcinogen.
Reproductive effects
No information available.

STOT - single exposure
Skin, Central Nervous System (CNS), Eyes
Causes damage to organs through prolonged or repeated exposure
blood, Central nervous system, Gastrointestinal tract, Eyes, kidney, liver, respiratory system, Skin.

Aspiration hazard
No information available.

Acute Toxicity
37.42339941 % of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life with long lasting effects
45.25869 % 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>P-CHLOROBENZOTRIFLUORIDE 98-56-6</td>
<td>11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static</td>
<td>3.68: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>tert-BUTYL ACETATE 540-88-5</td>
<td>296 - 362: 48 h Pimephales promelas mg/L LC50 flow-through</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRON 7439-89-6</td>
<td>13.6: 96 h Morone saxatilis mg/L LC50 static</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYL 3-ETHOXYPROPIONATE 763-69-9</td>
<td>62: 48 h Pimephales promelas mg/L LC50 static</td>
<td>970: 48 h Daphnia magna mg/L EC50</td>
<td></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>CARBON BLACK, AMORPHOUS 1333-86-4</td>
<td>5600: 24 h Daphnia magna mg/L EC50</td>
<td>5600: 24 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>BIS (PENTAMETHYLPIPERIDYL) SEBACATE 41556-26-7</td>
<td>0.97: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>20: 24 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>NICKEL 7440-02-0</td>
<td>0.174 - 0.311: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.18: 72 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>100: 96 h Brachydianio rerio mg/L LC50 1:3: 96 h Cyprinus carpio mg/L LC50 semi-static 10.4: 96 h Cyprinus carpio mg/L LC50 static</td>
<td>100: 48 h Daphnia magna mg/L EC50 1: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
<tr>
<td>COBALT OXIDE 1308-06-1</td>
<td>88: 72 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>136: 96 h Brachydianio rerio mg/L LC50 static</td>
<td>136: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>AMORPHOUS SILICA 7631-86-9</td>
<td>440: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>5000: 96 h Brachydianio rerio mg/L LC50 static</td>
<td>7600: 48 h Ceriodaphnia dubia 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>
</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.

### Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes
--- | --- | --- | --- | ---
XYLENE 1330-20-7 | | Included in waste stream: F039 | | U239
CHROMIUM 7440-47-3 | | Included in waste streams: F032, F034, F035, F037, F038, F039 | | 5.0 mg/L regulatory level
NICKEL 7440-02-0 | | Included in waste streams: F006, F039 |
TOLUENE 108-88-3 | U220 | Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151 | | U220

### Chemical name | CAWAST
--- | ---
CI PIGMENT BLACK 29 68187-50-8 | Toxic
NICKEL 7440-02-0 | Toxic
COBALT OXIDE 1308-06-1 | Toxic

14. TRANSPORT INFORMATION

**DOT**

<table>
<thead>
<tr>
<th>UN/ID no.</th>
<th>1263</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>PAINT</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>Emergency Response Guide Number</td>
<td>128</td>
</tr>
</tbody>
</table>

**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 | Does Not Comply
KECL | Does Not Comply
PICCS | Does Not Comply
AICS | Does Not Comply

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 | HAPS Data
DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE | 
CI PIGMENT BLACK 29 | 
NICKEL | 
COBALT OXIDE | 

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</td>
<td>1.0</td>
</tr>
<tr>
<td>CI PIGMENT BLACK 29</td>
<td>0.1</td>
</tr>
<tr>
<td>NICKEL</td>
<td>0.1</td>
</tr>
<tr>
<td>COBALT OXIDE</td>
<td>0.1</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous

Categorization

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Acute Health Hazard</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Yes</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>

<table>
<thead>
<tr>
<th>Chemical name</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>tert-BUTYL ACETATE</td>
<td>540-88-5</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NICKEL</td>
<td>7440-02-0</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>tert-BUTYL ACETATE</td>
<td>540-88-5</td>
<td>5000 lb</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
<tr>
<td>NICKEL</td>
<td>7440-02-0</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

California Prop. 65

WARNING: This product can expose you to the following chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK, AMORPHOUS - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>NICKEL - 7440-02-0</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>
AMORPHOUS SILICA - 7631-86-9 | Carcinogen
PETROLEUM SOLVENT (NAPTHA) - 64742-95-6 | Developmental
TOLUENE - 108-88-3 | Developmental
DIBUTYL Tin Dilauryl Mercaptide - 1185-81-5 | REPRODUCTIVE

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>P-CHLOROBENZOTRIFLUORIDE 98-56-6</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tert-BUTYL ACETATE 5-40-88-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MICA (RESPIRABLE DUST) 12001-26-2</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>CI PIGMENT BLACK 29 68187-50-8</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CARBON BLACK, AMORPHOUS 1333-84-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NICKEL 7440-02-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>COBALT OXIDE 1308-06-1</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>AMORPHOUS SILICA 7631-86-9</td>
<td>X</td>
<td>X</td>
<td>X</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>2</td>
<td>3</td>
<td>1</td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS (Hazardous Material Information System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Prepared By Tnemec Regulatory Dept: 816-474-3400
Revision Date 07-Nov-2018
Revision Summary 9 4 5 7 10 8 11 14 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
1. IDENTIFICATION

Product identifier
Product Code: V700-1070B
Product Name: HYDROFLON CONVERTER

Other means of identification
Common Name: SERIES V700/V701/1070V/1071V/1072V/1078V, PART B

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
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)

| Acute toxicity - Inhalation (Vapors) | Category 4 |
| Skin corrosion/irritation            | Category 2 |
| Serious eye damage/eye irritation    | Category 2A |
| Respiratory sensitization            | Category 1 |
| Skin sensitization                   | Category 1 |

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Precautionary Statements

Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace

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
If eye irritation persists: Get medical advice/attention
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
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: 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
SEE SAFETY DATA SHEET
Acute Toxicity 0 % 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>HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER</td>
<td>28182-81-2</td>
<td>60 - 100%</td>
</tr>
<tr>
<td>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER</td>
<td>822-06-0</td>
<td>0.1 - 1%</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. Call a physician immediately.

Inhalation  
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

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  
Foam. Dry chemical. Carbon dioxide.

Unsuitable extinguishing media  
Water.

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. Keep people away from and upwind of spill/leak.

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

Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling. Do not breathe vapours or spray mist.

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>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0</td>
<td>TWA: 0.005 ppm</td>
<td>-</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

INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. Do not breathe vapor or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. An airline respirator (TC 19C NIOSH/MSHA) is recommended. A vapor-particulate respirator (TC 23C NIOSH/MSHA) may be appropriate where air monitoring demonstrates vapors are less than ten times the applicable exposure limits and the isocyanate concentration is less than its applicable exposure limit. The use of an air-supplied respirator is mandatory whenever the airborne concentration of isocyanate monomer is unknown.

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>clear</td>
<td>Odor threshold</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Information

Level, 9.41886  lbs/gal

Volatile organic compounds (VOC) content, .000  lbs/gal

Total volatiles weight percent, .0000  

Total volatiles volume percent, .0000  

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
May occur if in contact with moisture, other materials which react with isocyanates, or temperatures above 400 F.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Water, Alcohols, Bases, Amines

Hazardous decomposition products

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
May cause sensitization by inhalation. Contains isocyanate monomer. If subject to spray application, engineering and administrative controls must be instituted to maintain an exposure level below .005ppm. If these controls are not adequate, the use of an air-supplied respirator is mandatory.

Eye contact
Severely irritating 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>HEXAMETHYLENE DIISOCYANATE (HDI) POLYMER 28182-81-2</td>
<td>= 18500 mg/m³ (Rat) 1 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0</td>
<td>= 710 µL/kg (Rat)</td>
<td>= 593 mg/kg (Rabbit)</td>
<td>= 0.06 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**
Skin disorders. Respiratory disorders.

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

**Chronic Toxicity**
Avoid repeated exposure. Contains isocyanates. May produce an allergic reaction.

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

**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.

**Acute Toxicity**
0 % of the mixture consists of ingredient(s) of unknown toxicity.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**
99.5 % 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>
<tbody>
<tr>
<td>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0</td>
<td>26.1: 96 h Brachydanio rerio mg/L LC50 static</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

**14. TRANSPORT INFORMATION**
**DOT**

Proper Shipping Name: PAINT & RELATED MATERIAL

**IATA**

**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</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td></td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td></td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td></td>
</tr>
<tr>
<td>ENCS</td>
<td></td>
</tr>
<tr>
<td>IECSC</td>
<td></td>
</tr>
<tr>
<td>KECL</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td></td>
</tr>
<tr>
<td>AICS</td>
<td></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):

**Component**  
HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER

#### 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 Title 40 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>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER - 822-06-0</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

#### 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>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER - 822-06-0</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

#### United States of America

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

California SCAQMD Rule 443
Does Not Contain 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>HEXAMETHYLENE DIISOCYANATE (HDI) MONOMER 822-06-0</td>
<td>X</td>
<td>X</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>0</td>
<td>1</td>
<td>*</td>
</tr>
</tbody>
</table>

<p>| HMIS (Hazardous Material Information System) |</p>
<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Prepared By: Tnemec Regulatory Dept: 816-474-3400
Revision Date: 09-Aug-2016
Revision Summary: 9 4 5 6 7 10 8 11 14 1 15

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End of SDS