1. PRODUCT AND COMPANY IDENTIFICATION

ULTRA-I™ 123-0.8 POSITIVE Photoresist

Revision Date: 09/12/2013

Supplier
ROHM AND HAAS ELECTRONIC MATERIALS LLC
A Subsidiary of The Dow Chemical Company
455 FOREST STREET
MARLBOROUGH, MA 01752 United States

For non-emergency information contact: 215-592-3000

Emergency telephone number
1 800 424 9300

Local emergency telephone number
989-636-4400

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2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl lactate</td>
<td>97-64-3</td>
<td>40.0 - 50.0 %</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>110-43-0</td>
<td>20.0 - 30.0 %</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl</td>
<td>107-98-2</td>
<td>10.0 - 20.0 %</td>
</tr>
<tr>
<td>ether</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diazo cresylic resin mixture</td>
<td></td>
<td>1.0 - 10.0 %</td>
</tr>
<tr>
<td>Organic Siloxane Surfactant</td>
<td></td>
<td>&lt; 1.0 %</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance

Form  liquid
Colour red
Odour Sweet odor
**Hazard Summary**

**CAUTION!**

Combustible liquid and vapor. Causes irritation to eyes, nose, and respiratory tract. Prolonged, repeated contact, inhalation, ingestion, or absorption through the skin, may cause adverse effects to internal organ systems.

**Potential Health Effects**

**Primary Routes of Entry:** Inhalation, ingestion, eye and skin contact, absorption.

**Eyes:** May cause pain, transient irritation and superficial corneal effects.

**Skin:** Material may cause irritation. Prolonged or repeated exposure may have the following effects:
- Drowsiness
- Defatting and drying of the skin which can lead to irritation and dermatitis
- Central nervous system depression
- Kidney damage
- Liver damage

**Ingestion:** Swallowing may have the following effects:
- Irritation of mouth, throat and digestive tract
- Headache
- Nausea
- Vomiting
  - Repeated doses may have the following effects:
    - Central nervous system depression
    - Liver damage
    - Kidney damage

**Inhalation:** Inhalation may have the following effects:
- Irritation of nose, throat and respiratory tract
  - Higher concentrations may have the following effects:
    - Systemic effects similar to those resulting from ingestion

**Target Organs:** Eye
- Respiratory System
- Nervous system
- Liver
- Kidney
- Skin

**Carcinogenicity**

Not considered carcinogenic by NTP, IARC, and OSHA

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**4. FIRST AID MEASURES**

**Inhalation:** Remove from exposure. If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.
Skin contact: Wash skin with water. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.

Eye contact: Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Ingestion: Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Induce vomiting if person is conscious. Immediate medical attention is required. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.

Notes to physician: Treat symptomatically.

5. FIREFIGHTING MEASURES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>39 °C (102 °F)</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.

Specific hazards during firefighting: This product may give rise to hazardous vapors in a fire. Vapors can travel a considerable distance to a source of ignition and result in flashback.

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: Pressure may build up in closed containers with possible liberation of combustible vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear suitable protective clothing.
Wear respiratory protection.
Eliminate all ignition sources.

Environmental precautions
Prevent the material from entering drains or water courses.
Do not discharge directly to a water source.
Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Methods for cleaning up
Contain spills immediately with inert materials (e.g., sand, earth).
Transfer into suitable containers for recovery or disposal.
Finally flush area with plenty of water.
7. HANDLING AND STORAGE

Handling
Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Keep container tightly closed.

Storage
**Storage conditions:** Store in original container. Keep away from heat and sources of ignition. Storage area should be: cool dry well ventilated out of direct sunlight

**Further information on storage conditions:** Keep away from heat, sparks, flame, and other sources of ignition. Practice good personal hygiene to prevent accidental exposure.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limit(s)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl lactate</td>
<td>Rohm and Haas</td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>Rohm and Haas</td>
<td>TWA</td>
<td>30 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>Rohm and Haas</td>
<td>STEL</td>
<td>90 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>ACGIH</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>ACGIH</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>OSHA P1</td>
<td>TWA</td>
<td>465 mg/m³ 100 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>OSHA P0</td>
<td>TWA</td>
<td>465 mg/m³ 100 ppm</td>
</tr>
<tr>
<td>2-Heptanone</td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>465 mg/m³ 100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>Rohm and Haas</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>Rohm and Haas</td>
<td>STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>ACGIH</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>ACGIH</td>
<td>STEL</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>ACGIH</td>
<td>STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>OSHA P0</td>
<td>TWA</td>
<td>360 mg/m³ 100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>OSHA P0</td>
<td>STEL</td>
<td>540 mg/m³ 150 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>360 mg/m³ 100 ppm</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>NIOSH REL</td>
<td>ST</td>
<td>540 mg/m³ 150 ppm</td>
</tr>
</tbody>
</table>

**Exposure controls**

**Engineering measures:** Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.
Individual protection measures

Eye/face protection: Goggles

Skin protection

Hand protection: Butyl rubber gloves. Other chemical resistant gloves may be recommended by your safety professional.

Other protection: Normal work wear.

Respiratory protection: Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form liquid
Colour red
Odour Sweet odor
pH ca. 7

Boiling point/boiling range 120 - 140 °C (248 - 284 °F)
Flash point 39 °C (102 °F)
Evaporation rate Slower than ether
Lower explosion limit no data available
Upper explosion limit no data available

Component: Ethyl lactate
Vapour pressure 1.7 mmHg at 20 °C (68 °F)

Component: 2-Heptanone
Vapour pressure 2.14 mmHg at 20 °C (68 °F)

Component: Electronic grade propylene glycol monomethyl ether
Vapour pressure 10.9 mmHg

Relative vapour density Heavier than air.
Relative density 1.07
Water solubility insoluble

VOC's 760 - 1,010 g/L

NOTE: The physical data presented above are typical values and should not be construed as a specification.
10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under normal conditions.

**Hazardous reactions**
No dangerous reaction known under conditions of normal use.

**Conditions to avoid**
Heat, flames and sparks. Static discharge Exposure to sunlight. Contact with incompatible materials

**Materials to avoid**
Strong oxidizing agents Reducing agents Bases Acids

**Hazardous decomposition products**
Carbon monoxide, carbon dioxide, oxides of sulfur, nitrogen oxides (NOx),

**polymerisation**
Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

**Carcinogenicity:**
Not considered carcinogenic by NTP, IARC, and OSHA

**Component:** Ethyl lactate
*Acute oral toxicity*
LD50 rat > 2,000 mg/kg OECD Test Guideline 425

**Component:** 2-Heptanone
*Acute oral toxicity*
LD50 rat 1,670 mg/kg

**Component:** Electronic grade propylene glycol monomethyl ether
*Acute oral toxicity*
LD50 rat 4,016 mg/kg

**Component:** Diazo cresylic resin mixture
*Acute oral toxicity*
Single dose oral LD50 has not been determined.

**Component:** Organic Siloxane Surfactant
*Acute oral toxicity*
Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

**Component:** 2-Heptanone
*Acute inhalation toxicity*
Vapor concentrations are attainable which could be hazardous on single exposure. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
<table>
<thead>
<tr>
<th>Component</th>
<th>Acute inhalation toxicity</th>
<th>Acute dermal toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electronic grade propylene glycol monomethyl ether</strong></td>
<td>LC50 rat 4 Hour 9.34 - 18.7 mg/l</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic grade propylene glycol monomethyl ether</strong></td>
<td>Brief exposure (minutes) is not likely to cause adverse effects.</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic grade propylene glycol monomethyl ether</strong></td>
<td>The odor is objectionable at 100 ppm; higher levels produce eye, nose, and throat irritation and are intolerable at 1000 ppm. Anesthetic effects are seen at or above 1000 ppm.</td>
<td></td>
</tr>
<tr>
<td><strong>Diazo cresyl resin mixture</strong></td>
<td>LC50 rat 6 Hour &gt; 25.8 mg/l</td>
<td>LC50 rabbit &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td><strong>Diazo cresyl resin mixture</strong></td>
<td>The LC50 has not been determined.</td>
<td>LD50 rabbit 10,289 mg/kg</td>
</tr>
<tr>
<td><strong>Organic Siloxane Surfactant</strong></td>
<td>LC50 rabbit &gt; 2,000 mg/kg</td>
<td>LD50 rabbit &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td><strong>Ethyl lactate</strong></td>
<td>LD50 rat &gt; 5,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>2-Heptanone</strong></td>
<td>LD50 rabbit 10,289 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic grade propylene glycol monomethyl ether</strong></td>
<td>LD50 rabbit &gt; 2,000 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Diazo cresyl resin mixture</strong></td>
<td>The dermal LD50 has not been determined.</td>
<td></td>
</tr>
<tr>
<td><strong>Organic Siloxane Surfactant</strong></td>
<td>Prolonged skin contact is unlikely to result in absorption of harmful amounts.</td>
<td></td>
</tr>
<tr>
<td><strong>2-Heptanone</strong></td>
<td>Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic grade propylene glycol monomethyl ether</strong></td>
<td>No skin irritation</td>
<td>Prolonged contact may cause slight skin irritation with local redness. Repeated contact may cause slight skin irritation with local redness.</td>
</tr>
<tr>
<td><strong>Diazo cresyl resin mixture</strong></td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td><strong>Organic Siloxane Surfactant</strong></td>
<td>No relevant data found.</td>
<td></td>
</tr>
<tr>
<td><strong>Ethyl lactate</strong></td>
<td>Eye irritation</td>
<td>Single application to the rabbit eye produced conjunctival irritation.</td>
</tr>
<tr>
<td><strong>2-Heptanone</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Eye irritation
May cause moderate eye irritation.
May cause slight corneal injury.
Vapor may cause eye irritation experienced as mild discomfort and redness.

Component: Electronic grade propylene glycol monomethyl ether
Eye irritation
No eye irritation
May cause slight temporary eye irritation.
Corneal injury is unlikely.

Component: Diazo cresylic resin mixture
Eye irritation
no data available

Component: Organic Siloxane Surfactant
Eye irritation
No relevant data found.

Component: Ethyl lactate
Sensitisation
no data available

Component: 2-Heptanone
Sensitisation
Did not cause allergic skin reactions when tested in humans.
Did not cause allergic skin reactions when tested in guinea pigs.

Component: 2-Heptanone
Sensitisation
For respiratory sensitization:
No relevant data found.

Component: Electronic grade propylene glycol monomethyl ether
Sensitisation
Did not cause allergic skin reactions when tested in guinea pigs.

Component: Electronic grade propylene glycol monomethyl ether
Sensitisation
For respiratory sensitization:
No relevant data found.

Component: Diazo cresylic resin mixture
Sensitisation
No relevant information found.

Component: Organic Siloxane Surfactant
Sensitisation
No relevant data found.

Component: Organic Siloxane Surfactant
Sensitisation
No relevant data found.

Component: Ethyl lactate
Carcinogenicity: no data available

Component: Ethyl lactate
Reproductive toxicity
no data available

Component: Ethyl lactate
Teratogenicity
Development effects were not observed in laboratory animals.

Component: Ethyl lactate
Mutagenicity
Reverse mutation test using bacteria: Non-mutagenic with and without metabolic activation
Component: **2-Heptanone**

**Subchronic toxicity**

In animals, effects have been reported on the following organs:
- Central nervous system.
- Kidney.
- Liver.

Component: **2-Heptanone**

**Carcinogenicity**: No relevant data found.

Component: **2-Heptanone**

**Reproductive toxicity**

Screening studies suggest that this material does not affect reproduction.

Component: **2-Heptanone**

**Teratogenicity**

No relevant data found.

Component: **2-Heptanone**

**Mutagenicity**

In vitro genetic toxicity studies were negative.

Component: **Electronic grade propylene glycol monomethyl ether**

**Subchronic toxicity**

Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

In animals, effects have been reported on the following organs:
- Kidney.
- Liver.

Component: **Electronic grade propylene glycol monomethyl ether**

**Carcinogenicity**: Did not cause cancer in laboratory animals.

Component: **Electronic grade propylene glycol monomethyl ether**

**Reproductive toxicity**

In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Component: **Electronic grade propylene glycol monomethyl ether**

**Teratogenicity**

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Component: **Electronic grade propylene glycol monomethyl ether**

**Mutagenicity**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Component: **Diazocresylic resin mixture**

**Subchronic toxicity**

No data available

Component: **Diazocresylic resin mixture**

**Carcinogenicity**: No relevant information found.

Component: **Diazocresylic resin mixture**

**Reproductive toxicity**

No relevant information found.

Component: **Diazocresylic resin mixture**

**Teratogenicity**

No relevant information found.

Component: **Diazocresylic resin mixture**

**Mutagenicity**

No data available
12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

**Ethyl lactate**

Elimination information (persistence and degradability)

Biodegradability

OECD Test Guideline 302
75 %

Ecotoxicity effects

**Toxicity to fish**

LC50 Zebra fish (Danio/Brachydanio rerio) 96 Hour OECD Test Guideline 203 or Equivalent
320 mg/l

**Toxicity to algae**

ER50 green alga Pseudokirchneriella subcapitata (formerly known as Selenastrum capricornutum) 96 Hour
3,500 mg/l

**Toxicity to aquatic invertebrates**

EC50 Daphnia magna (Water flea) 48 Hour
560 mg/l

**2-Heptanone**

Elimination information (persistence and degradability)

Biodegradability

Biodegradation under aerobic static laboratory conditions is moderate (BOD20 or BOD28/ThOD between 10 and 40%).

Ecotoxicity effects

**Toxicity to fish**

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).

**Toxicity to fish**

static test LC50 Pimephales promelas (fathead minnow) 96 Hour OECD Test Guideline 203 or Equivalent
131 mg/l
<table>
<thead>
<tr>
<th>Property</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to algae</td>
<td>EC50 Algae 96 Hour OECD Test Guideline 201</td>
</tr>
<tr>
<td></td>
<td>96 mg/l</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>EC50 Algae (Selenastrum capricornutum) 72 Hour OECD Test Guideline 201</td>
</tr>
<tr>
<td></td>
<td>98.2 mg/l</td>
</tr>
<tr>
<td>Toxicity to aquatic invertebrates</td>
<td>EC50 Daphnia magna 48 Hour OECD Test Guideline 202 or Equivalent</td>
</tr>
<tr>
<td></td>
<td>160 mg/l</td>
</tr>
<tr>
<td>Toxicity to aquatic invertebrates</td>
<td>static test EC50 Daphnia magna 48 Hour OECD Test Guideline 202 or Equivalent</td>
</tr>
<tr>
<td></td>
<td>&gt; 90.1 mg/l</td>
</tr>
<tr>
<td>Chemical Fate Biochemical Oxygen Demand (BOD)</td>
<td>17.8 %</td>
</tr>
<tr>
<td>Electronic grade propylene glycol monomethyl ether</td>
<td>Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>OECD Test Guideline 301E or Equivalent Biodegradable</td>
</tr>
<tr>
<td></td>
<td>96 %</td>
</tr>
<tr>
<td></td>
<td>10-day Window: Pass</td>
</tr>
<tr>
<td>Ecotoxicity effects</td>
<td>Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 &gt;100 mg/L in the most sensitive species tested).</td>
</tr>
<tr>
<td>Toxicity to fish</td>
<td>static test LC50 Leuciscus idus (Golden orfe) 96 Hour DIN 38412</td>
</tr>
<tr>
<td></td>
<td>6,812 mg/l</td>
</tr>
<tr>
<td>Toxicity to fish</td>
<td>semi-static test LC50 Oncorhynchus mykiss (rainbow trout) 96 Hour OECD Test Guideline 203 or Equivalent</td>
</tr>
<tr>
<td></td>
<td>&gt;= 1,000 mg/l</td>
</tr>
<tr>
<td>Toxicity to fish</td>
<td>static test LC50 Pimephales promelas (fathead minnow) 96 Hour OECD Test Guideline 203 or Equivalent</td>
</tr>
<tr>
<td></td>
<td>20,800 mg/l</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>static test ErC50 Pseudokirchneriella subcapitata (green algae) 7 d OECD Test Guideline 201 or Equivalent</td>
</tr>
<tr>
<td></td>
<td>&gt; 1,000 mg/l</td>
</tr>
<tr>
<td>Toxicity to bacteria</td>
<td>static test IC50 activated sludge</td>
</tr>
<tr>
<td></td>
<td>&gt; 1,000 mg/l</td>
</tr>
</tbody>
</table>
Toxicity to aquatic invertebrates  
static test LC50 Daphnia magna (Water flea) 48 Hour OECD Test  
Guideline 202 or Equivalent  
21,100 - 25,900 mg/l

Chemical Fate  
Chemical Oxygen Demand (COD)  
1.84 mg/g

Organic Siloxane Surfactant  
Elimination information (persistence and degradability)  
Biodegradability  
No relevant data found.

Bioaccumulation  
No data available.

Ecotoxicity effects  
Toxicity to fish  
No relevant data found.

13. DISPOSAL CONSIDERATIONS

Environmental precautions:  
Prevent the material from entering drains or water courses.  
Do not discharge directly to a water source.  
Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

Disposal  
Dispose in accordance with all local, state (provincial), and federal regulations. Incineration is the recommended method of disposal for containers. Under RCRA, it is the responsibility of the product’s user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.  
Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

14. TRANSPORT INFORMATION

DOT  
Not regulated per 49CFR 173.150(f)(2)

Classification for SEA transport (IMO-IMDG):  
Proper shipping name  RESIN SOLUTION  
UN number  UN 1866  
Class  3  
Packing group  III

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.
15. REGULATORY INFORMATION

Workplace Classification
OSHA: Combustible
      Irritant

WHMIS: This product is a ‘controlled product’ under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III: Section 311/312 Categorizations (40CFR370): Immediate, delayed, flammability hazard

SARA TITLE III: Section 313 Information (40CFR372)
This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

United States TSCA Inventory (US.TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

California (Proposition 65)
This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION

NFPA Hazard Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Legend

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>American Conference of Governmental Industrial Hygienists</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAc</td>
<td>Butyl acetate</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit (STEL):</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average (TWA):</td>
</tr>
</tbody>
</table>

| Bar | Bar denotes a revision from prior MSDS.                   |

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