1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS A
Product Name: Quik-Shield A
Company Name: SWD URETHANE
539 S. Drew St.
Mesa, AZ  85210,

Web site address: www.swdurethane.com
Emergency Contact: CHEMTREC
(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 5
Skin Corrosion/Irritation, Category 2
Skin Sensitization, Category 1
Serious Eye Damage/Eye Irritation, Category 2B
Acute Toxicity: Inhalation, Category 4
Respiratory Sensitization, Category 1
Carcinogenicity, Category 2

GHS Signal Word: Danger
GHS Hazard Phrases:
H303 - May be harmful if swallowed.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H320 - Causes eye irritation.
H332 - Harmful if inhaled.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351 - Suspected of causing cancer .
H401 - Toxic to aquatic life.

GHS Precaution Phrases:
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P284 - Wear respiratory protection .
P285 - In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases:
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P341 - If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313 - IF exposed or concerned: Get medical attention/advice.
P332+313 - If skin irritation occurs, get medical advice/attention.
P337+313 - If eye irritation persists, get medical advice/attention.
P342+311 - If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P362 - Take off contaminated clothing and wash before re-use.
P405 - Store locked up.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Ingredients/Components</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>9016-87-9</td>
<td>Polymeric diphenylmethane diisocyanate</td>
<td>0.0 -100.0 %</td>
</tr>
<tr>
<td></td>
<td>(Isocyanic acid, Poly</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Emergency and First Aid Procedures:
In Case of Inhalation: If breathed in, move person into fresh air. If not breathing give artificial respiration.
In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.
In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.
Consult a physician.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

5. FIRE FIGHTING MEASURES

Flash Pt: > 150.00 C Method Used: Closed Cup
Explosive Limits: LEL: UEL: NA
Autoignition Pt: NA
Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.
Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:
Personal precautions.
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
Environmental precautions.
Do not let product enter drains.
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Precautions To Be Taken in Storing:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>9016-87-9</td>
<td>Polymeric diphenylmethane diisocyanate (Isocyanic acid, Poly)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type):
When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and HEPA (P100) particulate filter may be used under certain conditions when the cartridge change-out schedule has been developed in accordance with the OSHA respiratory protection standard (29 CFR 1910.134).

Eye Protection: Face shield and safety glasses.
Protective Gloves: Handle with gloves.
Other Protective Clothing: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[ X ] Liquid</th>
<th>[ ] Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and Odor:</td>
<td>Slightly. Musty.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point:</td>
<td>42.00 C - 45.00 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>200.00 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>&gt; 150.00 C Method Used: Closed Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL:</td>
<td>UEL:</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>1.18 G/CM3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solubility in Water:
10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid - Instability: Contact with moisture, other materials that react with isocyanates, or temperatures above 350 °F (177 °C), may cause polymerization.


Hazardous Decomposition or Byproducts: formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [ X ]

11. TOXICOLOGICAL INFORMATION

Toxicological Information: CAS# 9016-87-9:
Not reported., LC50, Not reported., Rat, 490.0 MG/M3.
Results:
Behavioral: Somnolence (general depressed activity).
Behavioral: Convulsions or effect on seizure threshold.
- National Technical Information Service, Vol/p/yr: OTS05, 6728

Not reported., LD50, Dermal, Rat, 490.0 MG/L.
Results:
Behavioral: Somnolence (general depressed activity).
Behavioral: Convulsions or effect on seizure threshold.

Not reported., LC50, Not reported., Rat, 490.0 MG/M3.
Results:
Kidney, Ureter, Bladder: Renal function tests depressed.
Blood: Other changes.

Irritation or Corrosion: Serious eye damage/eye irritation:
Eyes - rabbit - Moderate eye irritation.

Carcinogenicity/Other Information: Carcinogenicity.
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies.
IARC: Group 3: Not classifiable as to its carcinogenicity to humans 3.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
12. ECOLOGICAL INFORMATION

Persistence and Degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging.
Dispose of as unused product.

14. TRANSPORT INFORMATION

Additional Transport Information: Not regulated except when shipped in bulk. Bulk containers (>9 000 lbs) must be transported as: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Methylene Diphenyl Diisocyanate), Class 9, UN3082, PG III, RQ.

LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: Other regulated substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate)
DOT Hazard Class: 9 CLASS 9
UN/NA Number: NA3082 Packing Group: III

LAND TRANSPORT (Canadian TDG):
TDG Shipping Name: Not Regulated.
UN Number: 3082 Packing Group: III
Hazard Class: 9 - CLASS 9 TDG Classification:

MARINE TRANSPORT (IMDG/IMO):
IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):
ICAO/IATA Shipping Name: Not Regulated.
15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Ingredients/Components</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9016-87-9</td>
<td>Polymeric diphenylmethane diisocyanate (Isocyanic acid, Poly)</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N120</td>
</tr>
</tbody>
</table>

Other US EPA or State Lists

- CAA HAP, ODC: No
- CWA NPDES: No
- TSCA: Yes
  - Inventory, 8C, 8D TERM: No
  - CA PROP.65: No
  - CA TAG, Title 8: No
  - MA Oil/HazMat: No
  - MI CMR, Part 5: No
  - NC TAP: No
  - NJ EHS: Yes - Cat.
  - NY Part 597: No
  - PA HSL: No
  - SC TAP: No
  - WI Air: No

International Regulatory Lists

- Canadian DSL: Yes
- Canadian NDSL: No

Regulatory Information:

This product contains chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372.

Incipient fire responders should wear eye protection. Firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

Incipient fire responders should wear eye protection. Firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

16. OTHER INFORMATION

Revision Date: 12/12/2018

Additional Information About This Product:

While the information and recommendations in this publication are given to the best of our knowledge, and information at the date of publication, nothing herein is to be construed as a warranty, expressed or otherwise. In all cases, it is the responsibility of the user to determine the applicability of such information, and recommendations or the suitability of any product for its own particular purpose.

The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED SWD EMPLOYEE SHALL PROVIDE, OR MAKE AVAILABLE, DATA SHEETS FOR SWD PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION
THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SWD. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET OR QUESTIONS REGARDING THIS DATA SHEET SHOULD BE DIRECTED TO SWD AT 800-828-1394.
1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: QS 125 B
Product Name: Quik-Shield 125 B
Company Name: SWD URETHANE
539 S. Drew St.
Mesa, AZ  85210,
Web site address: www.swdurethane.com
Emergency Contact: CHEMTREC
(800) 424-9300

2. HAZARDS IDENTIFICATION

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 5
Skin Corrosion/Irritation, Category 3
Serious Eye Damage/Eye Irritation, Category 2B
Aquatic Toxicity (Acute), Category 3

GHS Signal Word: Warning
GHS Hazard Phrases:
- H302 - Harmful if swallowed.
- H313 - May be harmful in contact with skin.
- H316 - Causes mild skin irritation.
- H320 - Causes eye irritation.
- H402 - Harmful to aquatic life.

GHS Precaution Phrases:
- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.

GHS Response Phrases: No phrases apply.
GHS Storage and Disposal Phrases:

Potential Health Effects (Acute and Chronic):
Inhalation: Causes respiratory tract irritation. Harmful if inhaled. May cause narcotic effects in high concentration. May cause lung damage. May cause anemia. May cause central nervous system effects such as nausea and headache.

Skin Contact: Causes skin irritation. Harmful if absorbed through the skin. Substance is rapidly absorbed through the skin. Causes symptoms similar to those of inhalation. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans.

Eye Contact: Causes eye irritation. Causes eye irritation. Causes redness and pain. Contact with eyes may cause severe irritation, and possible eye burns. Lachrymator (substance which increases the flow of tears).

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause burns to the digestive tract.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Halogenated Phosphate</td>
<td>10.0 -20.0 %</td>
</tr>
<tr>
<td>460-73-1</td>
<td>1,1,1,3,3-Pentafluoropropane (HFC-245fa)</td>
<td>5.0 -10.0 %</td>
</tr>
<tr>
<td>NA</td>
<td>Glycol ether</td>
<td>&lt; 5.0 %</td>
</tr>
<tr>
<td>NA</td>
<td>Amine catalyst</td>
<td>&lt; 3.0 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

**In Case of Inhalation:** If breathed in, move person into fresh air. Get medical aid immediately. Remove from exposure and move to fresh air immediately. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If not breathing, give artificial respiration.

**In Case of Skin Contact:** Wash off with soap and plenty of water. Consult a physician. Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid. Wash clothing before reuse. Destroy contaminated shoes.

**In Case of Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

**In Case of Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Do NOT induce vomiting. Get medical aid immediately. Call a poison control center.

**Signs and Symptoms Of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Note to Physician:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

**Flash Pt:** No data.

**Explosive Limits:**
- LEL: No data.
- UEL: No data.

**Autoignition Pt:** No data.

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam. Do NOT get water inside containers. For large fires, use water spray, fog, or alcohol-resistant foam.

**Fire Fighting Instructions:** Wear self contained breathing apparatus for fire fighting if necessary. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air.

**Flammable Properties and Hazards:** No data available.
6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Personal precautions.
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions.
Do not let product enter drains.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment. Do not flush into a sewer. Do not get water inside containers.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:
Avoid inhalation of vapor or mist.
Normal measures for preventive fire protection. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation.

Precautions To Be Taken in Storing:
Keep container tightly closed in a dry and well-ventilated place. Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Halogenated Phosphate</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>460-73-1</td>
<td>1,1,1,3,3-Pentafluoropropane (HFC-245fa)</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>NA</td>
<td>Glycol ether</td>
<td>PEL: 50 ppm</td>
<td>TLV: 20 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td>NA</td>
<td>Amine catalyst</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type):
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Eye Protection:
Face shield and safety glasses. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves:
Handle with gloves. Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing:
Choose body protection according to the amount and concentration of the dangerous
substance at the work place. Wear appropriate protective clothing to prevent skin exposure.

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [   ] Gas       [ X ] Liquid       [   ] Solid
Appearance and Odor: Viscous. Musty.
Melting Point: No data.
Boiling Point: No data.
Autoignition Pt: No data.
Flash Pt: No data.
Explosive Limits: LEL: No data. UEL: No data.
Specific Gravity (Water = 1): No data.
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): No data.
Evaporation Rate: No data.
Solubility in Water: No data.
Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [   ] Stable [ X ]
Conditions To Avoid - Instability: No data available. Incompatible materials, ignition sources.
Incompatibility - Materials To Avoid: Strong oxidizing agents, Strong bases, Aluminum, Copper, Copper alloys, Zinc, acids.
Hazardous Decomposition or Byproducts: formed under fire conditions. Carbon oxides,
Phosphorous oxides, Hydrogen chloride gas,
Thermal decomposition 244 °C Carbon monoxide, Nitrogen oxides, Carbon dioxide.
Possibility of Hazardous Reactions: Will occur [   ] Will not occur [ X ]
Conditions To Avoid - Hazardous Reactions: No data available.
### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:**

- **Epidemiology:** No information found.
- **Teratogenicity:** No information available. **Mutagenicity:** Neurotoxicity: No information available.
- **Other Studies:**
  - CAS# NA:
    - Acute toxicity, LD50, Oral, Rat, 3600. MG/KG.
  - Results:
    - Behavioral: Somnolence (general depressed activity).
    - Behavioral: Tremor.
    - Lungs, Thorax, or Respiration: Other changes.
    - - National Technical Information Service, Vol/p/yr: OTS05, 7713

  - Acute toxicity, LD50, Intravenous, Mouse, 56.00 MG/KG.
  - Results:
    - Behavioral: Food intake (animal).
    - Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

  - Skin corrosion/irritation, Skin sensitization, Skin, Rabbit, 0.000, Mild.
  - Results:
    - Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Lacrimation.
    - Behavioral: Tremor.
    - Lungs, Thorax, or Respiration: Cyanosis.
  - Skin - rabbit - Mild skin irritation - 24 h.
  - Serious eye damage/eye irritation:
    - Eyes - rabbit - Mild eye irritation.

**Irritation or Corrosion:**

**Carcinogenicity/Other Information:**

- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 111-76-2: ACGIH: A3
  - **California:** Not listed.
  - **NTP:** Not listed.
  - **IARC:** Not listed. CAS# 108-01-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Halogenated Phosphate</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>460-73-1</td>
<td>1,1,1,3,3-Pentafluoropropane  (HFC-245fa)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>NA</td>
<td>Glycol ether</td>
<td>n.a.</td>
<td>3</td>
<td>A3</td>
<td>n.a.</td>
</tr>
<tr>
<td>NA</td>
<td>Amine catalyst</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>
### 12. ECOLOGICAL INFORMATION

| General Ecological Information: | Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.

Physical: No information found.

Other: An estimated BCF value of 2.5, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme. |
| Persistence and Degradability: | No data available. |
| Bioaccumulative Potential: | No data available. |
| Mobility in Soil: | No data available. |

### 13. DISPOSAL CONSIDERATIONS

| Waste Disposal Method: | Product. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging. Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. RCRA P-Series: None listed. RCRA U-Series: None listed. |

### 14. TRANSPORT INFORMATION

| GHS Classification: | Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed. Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin. Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation. Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation. Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life. |
| LAND TRANSPORT (US DOT): | DOT Proper Shipping Name: Not Regulated. DOT Hazard Class: UN/NA Number: |
| LAND TRANSPORT (Canadian TDG): | TDG Shipping Name: Not Regulated. UN Number: Hazard Class: TDG Classification: |
| MARINE TRANSPORT (IMDG/IMO): | IMDG/IMO Shipping Name: Not Regulated. |
| AIR TRANSPORT (ICAO/IATA): | ICAO/IATA Shipping Name: Not Regulated. |
### 15. REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
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<tbody>
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<tr>
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<td>Glycol ether</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>NA</td>
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#### Other US EPA or State Lists

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<th>CWA NPDES:</th>
<th>TSCA:</th>
<th>Inventory, 8D TERM;</th>
<th>CA PROP,65:</th>
<th>CA TAC, Title 8:</th>
<th>MA Oil/HazMat:</th>
<th>MI CMR, Part 5:</th>
<th>NC TAP:</th>
<th>NJ EHS:</th>
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#### International Regulatory Lists

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<td>Glycol ether</td>
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</tr>
<tr>
<td>NA</td>
<td>Amine catalyst</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

#### Regulatory Information:

This product contains chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372.

**CAS# n/a, Glycol Ether: <5.0%**
16. OTHER INFORMATION

Revision Date: 04/30/2015

Additional Information About This Product: No data available.

Company Policy or Disclaimer:

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The product may present hazards and should be used with caution. While certain hazards are described in this Safety Data Sheet, no guarantee is made that these are the only hazards that exist. Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

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