SAFETY DATA SHEET

1. Identification

Product identifier FLEET-TECH MICROBICIDE SP

Other means of identification

<table>
<thead>
<tr>
<th>SDS number</th>
<th>LT16619</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>CC2671, CC2672, CC2673</td>
</tr>
</tbody>
</table>

Recommended use Fuel system preservative for eliminating micro-organisms, bacteria and fungi.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

<table>
<thead>
<tr>
<th>Company name</th>
<th>Cummins Filtration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>1200 Fleetguard Road, Cookeville, TN 38506, United States</td>
</tr>
<tr>
<td>Telephone</td>
<td>24 Hours per day 1-800-22FILTER (1-800-223-4583)</td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>Within Continental U.S. Chemtrec 1-800-424-9300, Outside U.S. Chemtrec 703-527-3887</td>
</tr>
<tr>
<td>E-mail</td>
<td>Not available.</td>
</tr>
<tr>
<td>Supplier</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

2. Hazard(s) identification

Physical hazards

This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards

- Skin corrosion/irritation Category 1
- Serious eye damage/eye irritation Category 1
- Sensitization, skin Category 1

Environmental hazards

This mixture does not meet the classification criteria according to OSHA HazCom 2012.

OSHA defined hazards

This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements

Signal word Danger

Hazard statement Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage.

Precautionary statement

Prevention

Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Exposure to low vapour concentrations may cause swelling (edema) of the eyes, resulting in blurring of vision with a bluish haze and/or appearance of halos around lights. Ingestion of large amounts may affect oxygen transport in the blood and blood system, causing methemoglobinemia. Symptoms of poisoning may include cyanosis (bluish discoloration of the skin), nausea, dizziness, rapid heartbeat, irregular breathing, coma and death. Prolonged or repeated overexposure may cause liver and kidney effects.

Supplemental information

% of the mixture consists of component(s) of unknown acute oral toxicity. % of the mixture consists of component(s) of unknown acute dermal toxicity.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tripropylene Glycol Methyl Ether</td>
<td>Not Available</td>
<td>20324-33-8</td>
<td>53.0 - 55.0</td>
</tr>
<tr>
<td>4,4':(2-ethyl-2-nitrotrimethylene)dimorpholine</td>
<td>Not Available</td>
<td>1854-23-5</td>
<td>0.9 - 3.2</td>
</tr>
<tr>
<td>Tetrahydro-1, 4-oxazine</td>
<td>Not Available</td>
<td>110-91-8</td>
<td>1.4 - 2.7</td>
</tr>
<tr>
<td>1-nitropropane</td>
<td>Not Available</td>
<td>108-03-2</td>
<td>0.1 - 2.4</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>38.5</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off immediately all contaminated clothing. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

Hazardous combustion products

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

**Precautions for safe handling**

Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid prolonged exposure. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-nitropropane (CAS 108-03-2)</td>
<td>PEL</td>
<td>90 mg/m3</td>
</tr>
<tr>
<td>Tetrahydro-1, 4-oxazine (CAS 110-91-8)</td>
<td>PEL</td>
<td>70 mg/m3</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-nitropropane (CAS 108-03-2)</td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
<tr>
<td>Tetrahydro-1, 4-oxazine (CAS 110-91-8)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-nitropropane (CAS 108-03-2)</td>
<td>TWA</td>
<td>90 mg/m3</td>
</tr>
<tr>
<td>Tetrahydro-1, 4-oxazine (CAS 110-91-8)</td>
<td>STEL</td>
<td>105 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>70 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

**US - California OELs: Skin designation**

Tetrahydro-1, 4-oxazine (CAS 110-91-8) Can be absorbed through the skin.
US - Minnesota Haz Subs: Skin designation applies
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Skin designation applies.

US - Tennessee OELs: Skin designation
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Can be absorbed through the skin.

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment
Eye/face protection Wear eye/face protection. Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection
Hand protection Wear appropriate chemical-resistant gloves.

Other Wear appropriate chemical-resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance
Physical state Liquid.
Form Liquid. oily liquid
Color Colorless to yellow

Odor Slight. Amine-like.
Odor threshold Not available.

pH 9

Melting point/freezing point Not available.
Initial boiling point and boiling range > 392 °F (> 200 °C)

Flash point Not available.
Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%) Not available.
Flammability limit - upper (%) Not available.
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.

Vapor pressure 40 mm Hg at 37°C
Vapor density Not available.

Relative density Not available.

Solubility(ies)
Solubility (water) Miscible
Partition coefficient
(n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.
Other information
Percent volatile 4.5 % estimated
Specific gravity 1.01 @ 25°C

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Contact with incompatible materials.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
Skin contact Toxic in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
Eye contact Causes serious eye damage.
Ingestion Causes digestive tract burns. Harmful if swallowed.
Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects
Acute toxicity Toxic in contact with skin. Harmful if swallowed. May cause an allergic skin reaction.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-nitropropane (CAS 108-03-2)</td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>4384 ppm, 4 hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>455 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4,4’-(2-ethyl-2-nitrotrimethylene)dimorpholine (CAS 1854-23-5)</strong></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>420 mg/kg</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 2.33 mg/l/4h</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>620 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tetrahydro-1, 4-oxazine (CAS 110-91-8)</strong></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>500 mg/kg</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>8.017 mg/l/4h</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>1050 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tripropylene Glycol Methyl Ether (CAS 20324-33-8)

**Acute**
- **Oral**
  - LD50 Rat: 3.3 g/kg

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation**
Causes serious eye damage.

**Respiratory or skin sensitization**
- **Respiratory sensitization** Not available.
- **Skin sensitizer** May cause an allergic skin reaction.
- **Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
- Tetrahydro-1, 4-oxazine (CAS 110-91-8) Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
- Not listed.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration toxicity** Not available.

**Chronic effects** Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Components**

<table>
<thead>
<tr>
<th>Tripropylene Glycol Methyl Ether (CAS 20324-33-8)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>3.3 g/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1-nitropropane (CAS 108-03-2)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rainbow trout (Oncorhynchus mykiss)</td>
<td>227 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4,4'-((2-ethyl-2-nitrotrimethylene)dimorpholine (CAS 1854-23-5)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rainbow trout (Oncorhynchus mykiss)</td>
<td>1.1 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tetrahydro-1, 4-oxazine (CAS 110-91-8)</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rainbow trout (Oncorhynchus mykiss)</td>
<td>180 mg/l, 96 hours</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50</td>
<td>Green Algae (Scenedesmus subspicatus) 58 mg/l, 72 hours</td>
</tr>
<tr>
<td>NOEC</td>
<td></td>
<td>Green Algae (Scenedesmus subspicatus) 31 mg/l, 72 hours</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna) 44.5 mg/l, 48 hours</td>
</tr>
<tr>
<td><strong>Chronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>NOEC</td>
<td>Water flea (Daphnia magna) 5 mg/l, 21 days</td>
</tr>
<tr>
<td>Tripropylene Glycol Methyl Ether (CAS 20324-33-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>&gt; 10000 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) 11619 mg/l, 96 hours</td>
</tr>
<tr>
<td><strong>Chronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50</td>
<td>Algae 9067 mg/l, 96 hours</td>
</tr>
<tr>
<td>NOEC</td>
<td></td>
<td>Duckweed (Lemna minor) 483 mg/l, 28 days</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**
No data is available on the degradability of this product.

**Bioaccumulative potential**
No data available.

**Partition coefficient n-octanol / water (log Kow)**

<table>
<thead>
<tr>
<th>Substance</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-nitropropane</td>
<td>0.87</td>
</tr>
<tr>
<td>Tetrahydro-1, 4-oxazine</td>
<td>-0.86</td>
</tr>
</tbody>
</table>

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**
Dispose in accordance with all applicable regulations.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**DOT**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN2054</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Morpholine, solution (Tetrahydro-1, 4-oxazine RQ = 4348 LBS)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Class 8, Subsidiary risk 3</td>
</tr>
</tbody>
</table>
Material name: FLEET-TECH MICROBICIDE SP
CC2671, CC2672, CC2673    Version #: 01    Issue date: 02-27-2015

Special provisions: A6, T10, TP2
Packaging exceptions: None
Packaging non bulk: 201
Packaging bulk: 243

IATA
UN number: UN2054
UN proper shipping name: Morpholine solution (Tetrahydro-1, 4-oxazine)
Transport hazard class(es):
  Class: 8
  Subsidiary risk: 3
  Packing group: I
  Environmental hazards: Yes
  ERG Code: 8F
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Other information:
  Passenger and cargo aircraft: Allowed.
  Cargo aircraft only: Allowed.

IMDG
UN number: UN2054
UN proper shipping name: MORPHOLINE SOLUTION (Tetrahydro-1, 4-oxazine)
Transport hazard class(es):
  Class: 8
  Subsidiary risk: 3
  Packing group: I
  Environmental hazards: Yes
  Marine pollutant: Yes
  EmS: F-E, S-C
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.
General information

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
1-nitropropane (CAS 108-03-2) Listed.
Tetrahydro-1, 4-oxazine (CAS 110-91-8) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Tetrahydro-1, 4-oxazine (CAS 110-91-8)

US. Massachusetts RTK - Substance List
1-nitropropane (CAS 108-03-2)
Tetrahydro-1, 4-oxazine (CAS 110-91-8)

US. New Jersey Worker and Community Right-to-Know Act
1-nitropropane (CAS 108-03-2)
Tetrahydro-1, 4-oxazine (CAS 110-91-8)

US. Pennsylvania Worker and Community Right-to-Know Law
1-nitropropane (CAS 108-03-2)
Tetrahydro-1, 4-oxazine (CAS 110-91-8)
US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDLS)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 02-27-2015
Version #: 01
Disclaimer
Prepared by: ICC The Compliance Center Inc. 1-888-442-9628
http://www.thecompliancecenter.com

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Revision Information
Product and Company Identification: Product Codes
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
GHS: Classification
Bibliography
Not available.