1. Identification

Product identifier
PETROLEUM ETHER

Other means of identification

CAS number 8032-32-4
Synonyms Ligroin, Benzin, Petroleum Naphtha

Recommended use General purpose solvent.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company Name Greenfield Global USA Inc.
Address 1101 Isaac Shelby Drive
Shelbyville, KY 40065
USA
Telephone 502.232.7600
Fax 502.633.6100

Company Name Greenfield Global USA Inc.
Address 58 Vale Road
Brookfield, CT 06804
USA
Telephone 203.740.3471
Fax 203.740.3481

Emergency phone number

USA CHEMTREC: 1.800.424.9300 (CCN 17213)
International CHEMTREC: +1.703.527.3887 (CCN 17213)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 2
Health hazards Skin corrosion/irritation Category 2
Germ cell mutagenicity Category 1B
Carcinogenicity Category 1B
Reproductive toxicity (fertility) Category 2
Specific target organ toxicity, single exposure Category 3 narcotic effects
Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2
Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards Not classified.

Label elements

Signal word Danger
Hazard statement
Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility. Toxic to aquatic life with long lasting effects.

Precautionary statement
Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response
If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage
Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
None.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum ether</td>
<td>Ligroin, Benzin, Petroleum Naphtha</td>
<td>8032-32-4</td>
<td>90 - 100</td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. 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. Get medical attention if irritation develops and persists.

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
Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Thermal 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. Keep victim under observation. Symptoms may be delayed.

General information
Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. 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
Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides.

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
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

Highly flammable liquid and vapor.

**6. Accidental release measures**

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage**

**Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

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

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum ether (CAS 8032-32-4)</td>
<td>Ceiling</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>350 mg/m3</td>
</tr>
</tbody>
</table>

**Biological limit values**

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

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation 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. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Chemical goggles are recommended.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

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**PETROLEUM ETHER SDS US**

947135 Version #: 01 Revision date: - Issue date: 09-May-2019
### Skin protection
- Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

### Respiratory protection
- If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator with organic vapor cartridge and full facepiece. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.

### Thermal hazards
- Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations
- Observe any medical surveillance requirements. When using do not 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.

### 9. Physical and chemical properties

#### Appearance
- **Physical state**: Liquid.
- **Form**: Liquid.
- **Color**: Clear. Colorless.
- **Odor**: Mild gasoline.
- **Odor threshold**: Not available.
- **pH**: Not available.
- **Melting point/freezing point**: -99.4 °F (-73 °C)
- **Initial boiling point and boiling range**: 96.8 °F (36 °C) @ 760 mm Hg
- **Flash point**: < 1.4 °F (< -17.0 °C)
- **Evaporation rate**: Slower than ether
- **Flammability (solid, gas)**: Not applicable.
- **Upper/lower flammability or explosive limits**:
  - **Flammability limit - lower (%)**: 1.1 % v/v
  - **Flammability limit - upper (%)**: 5.9 % v/v
- **Vapor pressure**: 5.33 kPa (68 °F (20 °C))
- **Vapor density**: Not available.
- **Relative density**: Not available.

#### Solubility(ies)
- **Solubility (water)**: Insoluble
- **Partition coefficient (n-octanol/water)**: Not available.

#### Auto-ignition temperature
- 548.6 °F (287 °C)

#### Decomposition temperature
- Not available.

#### Viscosity
- Not available.

#### Other information
- **Explosive properties**: Not explosive.
- **Oxidizing properties**: Not oxidizing.

### 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
Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

Skin contact
Causes skin irritation.

Eye contact
Direct contact with eyes may cause temporary irritation.

Ingestion
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonitis.

Symptoms related to the physical, chemical and toxicological characteristics
Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
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<tbody>
<tr>
<td>Petroleum ether (CAS 8032-32-4)</td>
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<td></td>
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<tr>
<td><strong>Acute</strong></td>
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<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>3400 mg/l, 4 Hours</td>
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<tr>
<td>Skin corrosion/irritation</td>
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<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td></td>
<td>Direct contact with eyes may cause temporary irritation.</td>
</tr>
</tbody>
</table>

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
May cause genetic defects.

Carcinogenicity
May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

NTP Report on Carcinogens
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

Reproductive toxicity
Suspected of damaging fertility.

Specific target organ toxicity - single exposure
May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
May be fatal if swallowed and enters airways.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
Toxic to aquatic life with long lasting effects.

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

Bioaccumulative potential
No data available.

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. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. 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**
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

**DOT**

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1268</th>
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<tr>
<td>UN proper shipping name</td>
<td>Petroleum distillates, n.o.s. (Petroleum ether)</td>
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<td>Transport hazard class(es)</td>
<td>3</td>
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<tr>
<td>Class</td>
<td>3</td>
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<tr>
<td>Subsidiary risk</td>
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<td>Label(s)</td>
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<tr>
<td>Packing group</td>
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<tr>
<td>Environmental hazards</td>
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<tr>
<td>Marine pollutant</td>
<td>Yes.</td>
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<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
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<tr>
<td>Special provisions</td>
<td>144, IB2, T7, TP1, TP8, TP28</td>
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<tr>
<td>Packaging exceptions</td>
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<td>Packaging non bulk</td>
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<tr>
<td>Packaging bulk</td>
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**IATA**

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<th>UN1268</th>
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<tr>
<td>UN proper shipping name</td>
<td>Petroleum distillates n.o.s. (Petroleum ether)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
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</tr>
<tr>
<td>Class</td>
<td>3</td>
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<tr>
<td>Subsidiary risk</td>
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<tr>
<td>Packing group</td>
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<td>ERG Code</td>
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<td>Read safety instructions, SDS and emergency procedures before handling.</td>
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**IMDG**

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<td>UN proper shipping name</td>
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<td>Transport hazard class(es)</td>
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<td>Class</td>
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<td>Subsidiary risk</td>
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<td>Packing group</td>
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<td>Environmental hazards</td>
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<td>Marine pollutant</td>
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<td>EmS</td>
<td>F-E, S-E</td>
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<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
</tbody>
</table>

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not established.

15. Regulatory information

**US federal regulations**
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Petroleum Ether (CAS 8032-32-4)

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

**CERCLA Hazardous Substance List (40 CFR 302.4)**
Not listed.

**SARA 304 Emergency release notification**
Not regulated.

Not listed.

**Toxic Substances Control Act (TSCA)**
This substance is on the TSCA 8(b) inventory and is designated “active”.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**
Not listed.

**SARA 311/312 Hazardous chemical**
Yes

**Classified hazard categories**
Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

**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. Massachusetts RTK - Substance List**
Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**
Petroleum ether (CAS 8032-32-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**
Petroleum ether (CAS 8032-32-4)

**US. Rhode Island RTK**
Not regulated.

**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. For more information go to www.P65Warnings.ca.gov.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**
Petroleum ether (CAS 8032-32-4)

**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>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
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<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>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
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<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>No</td>
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<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies 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**: 09-May-2019  
**Revision date**: -  
**Version #**: 01  
**HMIS® ratings**  
- Health: 3*  
- Flammability: 3  
- Physical hazard: 0

**Disclaimer**  
Greenfield Global USA, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.