SAFETY DATA SHEET

1. Identification

Product identifier: Knock’er Loose® Penetrating Solvent

Other means of identification
- Product code: No. 03021 (Item# 1003272)
- Recommended use: Penetrant
- Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:
- Company name: CRC Industries, Inc.
- Address: 885 Louis Dr.
  Warminster, PA 18974 US
- Telephone: 215-674-4300
- General Information: 800-521-3168
- Technical Assistance: 800-272-4620
- Customer Service: 800-424-9300 (US)
- 24-Hour Emergency (CHEMTREC): 703-527-3887 (International)
- Website: www.crcindustries.com

2. Hazard(s) identification

Physical hazards
- Flammable liquids: Category 4

Health hazards
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Sensitization, skin: Category 1A
- Aspiration hazard: Category 1

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

OSHA defined hazards
- Not classified.

Label elements

Signal word: Danger
Hazard statement: Combustible liquid. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention
Keep away from flames and hot surfaces-No smoking. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. Avoid release to the environment.

Response
If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Do not use water jet as an extinguisher, as this will spread the fire. Collect spillage.
Storage
Store in a well-ventilated place. Keep cool. Store locked up.

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

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

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>distillates (petroleum), hydrotreated middle</td>
<td></td>
<td>64742-46-7</td>
<td>50 - 60</td>
</tr>
<tr>
<td>dipropylene glycol monomethyl ether acetate</td>
<td></td>
<td>88917-22-0</td>
<td>10 - 20</td>
</tr>
<tr>
<td>dipropylene glycol monopropyl ether (dpmp)</td>
<td></td>
<td>29911-27-1</td>
<td>10 - 20</td>
</tr>
<tr>
<td>turpentine, oil</td>
<td></td>
<td>8006-64-2</td>
<td>10 - 20</td>
</tr>
<tr>
<td>2,6-dimethyl-4-heptanone</td>
<td></td>
<td>108-83-8</td>
<td>3 - 5</td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated light</td>
<td></td>
<td>64742-47-8</td>
<td>1 - 3</td>
</tr>
<tr>
<td>naphtha (petroleum), hydrotreated heavy</td>
<td></td>
<td>64742-48-9</td>
<td>1 - 3</td>
</tr>
<tr>
<td>pine oil</td>
<td></td>
<td>8002-09-3</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. 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. Get medical attention if irritation develops and persists.

Ingestion
Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Most important symptoms/effects, acute and delayed
Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

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

General information
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
The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. 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
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

General fire hazards
Combustible liquid.
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 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**
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains.

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. 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**
Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. Use care in handling/storage. For product usage instructions, see the product label.

**Conditions for safe storage, including any incompatibilities**
Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Keep container tightly closed. 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>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-dimethyl-4-heptanone (CAS 108-83-8)</td>
<td>PEL</td>
<td>290 mg/m3</td>
<td></td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated light (CAS 64742-47-8)</td>
<td>PEL</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated middle (CAS 64742-46-7)</td>
<td>PEL</td>
<td>400 mg/m3</td>
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</tr>
<tr>
<td>naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)</td>
<td>PEL</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>turpentine, oil (CAS 8006-64-2)</td>
<td>PEL</td>
<td>400 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-dimethyl-4-heptanone (CAS 108-83-8)</td>
<td>TWA</td>
<td>25 ppm</td>
<td></td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated middle (CAS 64742-46-7)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Inhalable fraction.</td>
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<tr>
<td>turpentine, oil (CAS 8006-64-2)</td>
<td>TWA</td>
<td>20 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Material name: Knock'er Loose® Penetrating Solvent
No. 03021 (Item# 1003272)  Version #: 04  Revision date: 08-18-2017  Issue date: 05-06-2016
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-dimethyl-4-heptanone (CAS 108-83-8)</td>
<td>TWA</td>
<td>150 mg/m³</td>
<td></td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated light (CAS 64742-47-8)</td>
<td>TWA</td>
<td>100 mg/m³</td>
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</tr>
<tr>
<td>distillates (petroleum), hydrotreated middle (CAS 64742-46-7)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>turpentine, oil (CAS 8006-64-2)</td>
<td>TWA</td>
<td>560 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection
Hand protection
Wear protective gloves such as: Nitrile. Rubber.

Other
Wear appropriate chemical resistant clothing.

Respiratory protection
If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance
Physical state
Liquid.
Form
Liquid.
Color
Red.
Odor
Pleasant pine.
Odor threshold
Not available.
pH
Not available.

Melting point/freezing point
-121 °F (-85 °C) estimated

Initial boiling point and boiling range
311 °F (155 °C) estimated

Flash point
147 °F (63.9 °C) Tag Closed Cup

Evaporation rate
Moderate.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower
0.7 % estimated

Material name: Knock’er Loose® Penetrating Solvent
No. 03021 (Item# 1003272) Version #: 04 Revision date: 08-18-2017 Issue date: 05-06-2016 SDS US 4 / 10
Flammability limit - upper (%)
8.3 % estimated

Vapor pressure
4.7 hPa estimated

Vapor density
> 1 (air = 1)

Relative density
0.86

Solubility (water)
Negligible.

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
401 °F (205 °C) estimated

Decomposition temperature
Not available.

Viscosity (kinematic)
Not available.

Percent volatile
100 % estimated

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
No dangerous reaction known under conditions of normal use.

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

Incompatible materials

Hazardous decomposition products

11. Toxicological information
Information on likely routes of exposure
- Inhalation: Prolonged inhalation may be harmful.
- Skin contact: Causes skin irritation. May cause an allergic skin reaction.
- Eye contact: Causes serious eye irritation.
- Ingestion: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics
Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects
Acute toxicity
May be fatal if swallowed and enters airways.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-dimethyl-4-heptanone (CAS 108-83-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>16200 mg/kg</td>
</tr>
<tr>
<td>Inhalation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 5 mg/l, 4 hours</td>
</tr>
<tr>
<td>Oral:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>5285 mg/kg</td>
</tr>
</tbody>
</table>

dipropylene glycol monomethyl ether acetate (CAS 88917-22-0)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Inhalation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 20 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>dipropylene glycol monopropyl ether (dpmp) (CAS 29911-27-1)</td>
<td></td>
<td><strong>Acute</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>Dermal</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rabbit</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>Oral</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated light (CAS 64742-47-8)</td>
<td></td>
<td><strong>Acute</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Dermal</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
</tr>
<tr>
<td>distillates (petroleum), hydrotreated middle (CAS 64742-46-7)</td>
<td></td>
<td><strong>Acute</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Dermal</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
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<tr>
<td></td>
<td></td>
<td><strong>Oral</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
</tr>
<tr>
<td>naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)</td>
<td></td>
<td><strong>Acute</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Dermal</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rabbit</td>
</tr>
<tr>
<td>turpentine, oil (CAS 8006-64-2)</td>
<td></td>
<td><strong>Acute</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Oral</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Rat</td>
</tr>
</tbody>
</table>

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

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

ACGIH sensitization
TURPENTINE AND SELECTED MONOTERPENES Dermal sensitization

Respiratory sensitization Not a respiratory sensitizer.
Skin sensitization 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 Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

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

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure Not classified.
### Ecotoxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>dipropylene glycol monomethyl ether acetate (CAS 88917-22-0)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td><strong>dipropylene glycol monopropyl ether (dpmp) (CAS 29911-27-1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td><strong>distillates (petroleum), hydrotreated light (CAS 64742-47-8)</strong></td>
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<td></td>
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<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
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<td></td>
</tr>
<tr>
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<td><strong>distillates (petroleum), hydrotreated middle (CAS 64742-46-7)</strong></td>
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<td><strong>Aquatic</strong></td>
<td></td>
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<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
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<tr>
<td></td>
<td></td>
<td>8.8 mg/l, 96 hours</td>
</tr>
<tr>
<td><strong>naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)</strong></td>
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<tr>
<td><strong>Aquatic</strong></td>
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<td></td>
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<td></td>
<td>8.8 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

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

### Persistence and degradability

**Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol / water (log Kow)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>dipropylene glycol monomethyl ether acetate</td>
<td>0.61 OECD 107</td>
</tr>
<tr>
<td>dipropylene glycol monopropyl ether (dpmp)</td>
<td>0.87 OECD 107</td>
</tr>
<tr>
<td></td>
<td>0.88 OECD 107</td>
</tr>
</tbody>
</table>

**Mobility in soil**

No data available.

**Other adverse effects**

The product contains volatile organic compounds which have a photochemical ozone creation potential.
13. Disposal considerations

Disposal of waste from residues / unused products
This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code
Not regulated.

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
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

SARA 304 Emergency release notification
Not regulated.

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

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: List substance
Not listed.

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

CERCLA Hazardous Substances: Reportable quantity
Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

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.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
2,6-dimethyl-4-heptanone (CAS 108-83-8) Other Flavoring Substances with OSHA PEL's

Food and Drug Administration (FDA)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)

US. New Jersey Worker and Community Right-to-Know Act
2,6-dimethyl-4-heptanone (CAS 108-83-8)
naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)
turpentine, oil (CAS 8006-64-2)

US. Massachusetts RTK - Substance List
2,6-dimethyl-4-heptanone (CAS 108-83-8)
naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)
turpentine, oil (CAS 8006-64-2)

US. Pennsylvania Worker and Community Right-to-Know Law
2,6-dimethyl-4-heptanone (CAS 108-83-8)
distillates (petroleum), hydrotreated light (CAS 64742-47-8)

US. Rhode Island RTK
2,6-dimethyl-4-heptanone (CAS 108-83-8)
naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)
turpentine, oil (CAS 8006-64-2)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
benzene (CAS 71-43-2) Listed: February 27, 1987
ethylbenzene (CAS 100-41-4) Listed: June 11, 2004
napthalene (CAS 91-20-3) Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin
benzene (CAS 71-43-2) Listed: December 26, 1997
toluene (CAS 108-88-3) Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin
benzene (CAS 71-43-2) Listed: December 26, 1997

Volatile organic compounds (VOC) regulations
EPA
VOC content (40 CFR 51.100(s)) 100 %
Consumer products (40 CFR 59, Subpt. C) Not regulated

State
Consumer products This product is regulated as a Penetrant. This product is compliant for use in all 50 states.
VOC content (CA) 24 %
VOC content (OTC) 24 %

International Inventories

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

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<thead>
<tr>
<th>Issue date</th>
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<tr>
<td>Revision date</td>
<td>08-18-2017</td>
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<tr>
<td>Prepared by</td>
<td>Allison Yoon</td>
</tr>
<tr>
<td>Version #</td>
<td>04</td>
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<tr>
<td>Further information</td>
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**HMIS® ratings**
- Health: 1
- Flammability: 2
- Physical hazard: 0
- Personal protection: B

**NFPA ratings**
- Health: 1
- Flammability: 2
- Instability: 0

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**Revision Information**
This document has undergone significant changes and should be reviewed in its entirety.