1. Identification

Product identifier: Soluble Oil

Other means of identification:

Product code: SL2512, SL2513, SL2515

Recommended use: Soluble oil

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:
- General Information: 215-674-4300
- Technical Assistance: 800-521-3168
- Customer Service: 800-272-4620
- 24-Hour Emergency (CHEMTREC): 703-527-3887 (International)

Website: www crcindustries.com

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.

Signal word: Not available.

Hazard statement: The mixture does not meet the criteria for classification.

Precautionary statement

Prevention: 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. Observe good industrial hygiene practices.

Response: Wash hands after handling.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

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>2-Methylpentane-2,4-diol</td>
<td></td>
<td>107-41-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Polyoxyl 10 Oleyl Ether</td>
<td></td>
<td>9004-98-2</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
**Skin contact**
Wash off with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention if symptoms occur. If ingestion of a large amount does occur, call a poison control center immediately.

**Most important symptoms/effects, acute and delayed**
Direct contact with eyes may cause temporary irritation.

**Indication of immediate medical attention and special treatment needed**
Treat symptomatically.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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**5. Fire-fighting measures**

**Suitable extinguishing media**
Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire-fighting equipment/instructions**
Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**General fire hazards**
No unusual fire or explosion hazards noted.

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**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
The product is immiscible with water and will spread on the water surface.

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.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

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**7. Handling and storage**

**Precautions for safe handling**
Wear appropriate personal protective equipment. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. When using, do not eat, drink or smoke. Wash contaminated clothing before reuse. Use appropriate container to avoid environmental contamination. For product usage instructions, please see the product label.

**Conditions for safe storage, including any incompatibilities**
Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

---

**8. Exposure controls/personal protection**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-Methylpentane-2,4-diol (CAS 107-41-5)</td>
<td>Ceiling</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>
2-Methylpentane-2,4-diol (CAS 107-41-5) | Ceiling | 125 mg/m³ 25 ppm

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.

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: Neoprene. Nitrile. Latex. Polyvinyl chloride (PVC).

Other
Wear suitable protective 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

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
Amber.
Odor
Mild petroleum.
Odor threshold
Not available.
pH
9.8 at 5% w/w
Melting point/freezing point
-58 °F (-50 °C) estimated
Initial boiling point and boiling range
> 212 °F (> 100 °C)
Flash point
250 °F (121.1 °C) Cleveland Open Cup
Evaporation rate
Not available.
Flammability (solid, gas)
Not available.
Upper/lower flammability or explosive limits
Flammability limit - lower (%) 1.4 % estimated
Flammability limit - upper (%) 7.1 % estimated
Vapor pressure
0.2 hPa estimated
Vapor density
Not available.
Relative density
0.92
Solubility (water)
Insoluble.
Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature
588.2 °F (309 °C) estimated
Decomposition temperature
Not available.
Viscosity (kinematic)
Not available.
Percent volatile
0.003 % 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
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion
Expected to be a low ingestion hazard.

Inhalation
Prolonged or excessive inhalation may cause respiratory tract irritation.

Skin contact
Prolonged skin contact may cause temporary irritation. Repeated exposure may cause skin dryness or cracking.

Eye contact
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble Oil</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>&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; 2000 mg/kg</td>
</tr>
</tbody>
</table>

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

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation.

Respiratory sensitization
Not available.

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

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.

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 hazard
Not available.

Chronic effects
Prolonged inhalation may be harmful.

Further information
This product has no known adverse effect on human health.

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.
### Product Test Results

#### Soluble Oil

**Species**

- **Aquatic**
  - **Crustacea**
    - **EC50**: 57136.7734 mg/l, 48 hours estimated
  - **Fish**
    - **LC50**: 2.5882 mg/l, 96 hours estimated

#### Components

**Species**

- **2-Methylpentane-2,4-diol (CAS 107-41-5)**
  - **Aquatic**
    - **Crustacea**
      - **EC50**: 2800 mg/l, 48 hours
    - **Fish**
      - **LC50**: 8000 mg/l, 96 hours

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

### Persistence and degradability

- Not readily biodegradable.

### 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.

### Disposal considerations

**Disposal of waste from residues / unused products**

- The dispensed liquid product is not a RCRA hazardous waste (See 40 CFR Part 261.20 - 261.33).
- Empty container can be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

**Hazardous waste code**

- Not regulated.

**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.

### Transport information

**DOT**

- Not regulated as dangerous goods.

**IATA**

- Not regulated as dangerous goods.

**IMDG**

- Not regulated as dangerous goods.

### Regulatory information

**US federal regulations**

- This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

- Not regulated.

**SARA 304 Emergency release notification**

- Not regulated.


- Not listed.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed 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.

Food and Drug Administration (FDA)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th>Immediate Hazard</th>
<th>Delayed Hazard</th>
<th>Fire Hazard</th>
<th>Pressure Hazard</th>
<th>Reactivity Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA 302 Extremely hazardous substance</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. New Jersey Worker and Community Right-to-Know Act
2-Methylpentane-2,4-diol (CAS 107-41-5)

US. Massachusetts RTK - Substance List
2-Methylpentane-2,4-diol (CAS 107-41-5)

US. Pennsylvania Worker and Community Right-to-Know Law
2-Methylpentane-2,4-diol (CAS 107-41-5)

US. Rhode Island RTK
None.

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

US - California Proposition 65 - CRT: Listed date/Developmental toxin
Methanol (CAS 67-56-1) Listed: March 16, 2012

Volatile organic compounds (VOC) regulations

EPA
VOC content (40 CFR 51.100(s)) 8 % (concentrate); 1.6 % (minimum dilution)
Consumer products (40 CFR 59, Subpt. C) Not regulated

State
Consumer products
This product is regulated as a Cutting or Tapping Oil (non-aerosol). This product is compliant for use in all 50 states.

VOC content (CA) 8 % (concentrate); 1.6 % (minimum dilution)
VOC content (OTC) 8 % (concentrate); 1.6 % (minimum dilution)

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>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>European</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>European</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>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>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>Yes</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

<table>
<thead>
<tr>
<th>Issue date</th>
<th>11-25-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Allison Cho</td>
</tr>
<tr>
<td>Version #</td>
<td>01</td>
</tr>
<tr>
<td>Further information</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**HMIS® ratings**
- Health: 1
- Flammability: 1
- Physical hazard: 0
- Personal protection: B

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

**Disclaimer**
CRC 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 contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries’ knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.