502 Soluble oil

Revision date 02-Jul-2019

1. IDENTIFICATION

1.1. Product identifier

Product name 502 Soluble oil
Product code 502
Synonyms None

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Lubricant
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer AXEL Royal, LLC 516 S. 25th West Ave Tulsa, OK 74127 United States 918 584 2671

1.4. Emergency telephone number

ChemTel Emergency telephone 1-800-255-3924
International Emergency telephone +01-813-248-0585

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1

2.2. Label elements

Signal word DANGER
Hazard statements Causes severe skin burns and eye damage.

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep only in original container.

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician Specific treatment (see .? on this label)
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 or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated
clothing before reuse. Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**
Store locked up. Store in corrosive resistant/.? container with a resistant inner liner. Dispose of contents/container to an approved waste disposal plant.

2.3. Hazards not otherwise classified (HNOC)
Not applicable.

2.4. Other information
Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.2. Mixtures**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-methylenebismorpholine</td>
<td>5625-90-1</td>
<td>2.5-5</td>
</tr>
<tr>
<td>Sodium myreth sulfate</td>
<td>25446-80-4</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Imidazoline</td>
<td>UNKNOWN</td>
<td>&lt;2.5</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret.

**Ingredient comments**
The mineral oils in the product contain <3% DMSO-extract (IP 346).

### 4. FIRST AID MEASURES

**4.1. Description of first aid measures**

**Inhalation**
Move to fresh air in case of accidental inhalation of vapors or decomposition products.

**Skin contact**
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Eye contact**
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.

**Ingestion**
Do not induce vomiting without medical advice. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms**
None known.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Use CO2, dry chemical, or foam.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Not flammable. Fire may produce irritating and/or toxic gases.

Hazardous combustion products: Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Extremely slippery when spilled. Avoid contact with eyes and skin. Avoid breathing vapors or mists. Use personal protection recommended in Section 8.

For emergency responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Use personal protective equipment as required. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling: Extremely slippery when spilled. Avoid prolonged or repeated contact with skin. Avoid breathing vapors or mists.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Keep at a temperature not exceeding 45°C.

Incompatible materials: None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure guidelines:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Engineering controls
- Eyewash stations
- Ventilation systems

8.3. Individual protection measures, such as personal protective equipment

Hand protection
Wear protective nitrile rubber gloves Thickness ≥ 0.38 mm - breakthrough time >480 minutes. Thickness 0.1 mm - splash protection.

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

Skin and body protection
No special technical protective measures are necessary.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Smooth</td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>amber</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93.5 °C / &gt; 200.3 °F</td>
<td>ASTM D92</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability limits in air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>0.8780</td>
<td>No information available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Soluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
### 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity
- Stable.

#### 10.2. Chemical stability
- Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions
- None under normal processing.

#### 10.4. Conditions to avoid
- Heat.

#### 10.5. Incompatible materials
- Strong oxidizing agents.

#### 10.6. Hazardous decomposition products
- None under normal processing.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Information on likely routes of exposure
- **Inhalation**: Inhalation of oil mist may cause irritation, headaches, nausea and breathing difficulties.
- **Ingestion**: Malaise (vague feeling of discomfort).
- **Skin contact**: The product causes burns of eyes, skin and mucous membranes.
- **Eye contact**: Corrosive to the eyes and may cause severe damage including blindness.

#### 11.2. Information on toxicological effects
- **Symptoms**: No information available.

#### 11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure
- **Skin corrosion/irritation**: Causes burns.
- **Serious eye damage/eye irritation**: Risk of serious damage to eyes.
- **Sensitization**: Not hazardous based on component data.
- **Germ cell mutagenicity**: Not hazardous based on component data.
- **Carcinogenicity**: Not hazardous based on component data.
- **Reproductive toxicity**: Not hazardous based on component data.
- **STOT-single exposure**: Not hazardous based on component data.
- **STOT-repeated exposure**: Not hazardous based on component data.
Aspiration hazard  
Not hazardous based on component data.

11.4. Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (oral)</td>
<td>6190 mg/kg</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>5716 mg/kg</td>
</tr>
<tr>
<td>ATEmix (inhalation-dust/mist)</td>
<td>55.6 mg/l</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity
Not regarded as dangerous for the environment. Occasional major emissions or frequently recurring minor emissions may have a harmful or disturbing effect.

12.2. Persistence and degradability
Not readily biodegradable.

12.3. Bioaccumulative potential
Material does not bioaccumulate.

12.4. Mobility in soil
After release, adsorbs onto soil.

12.5. Results of PBT and vPvB assessment
No information available

12.6. Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal of wastes</td>
<td>Dispose of in accordance with federal, state and local regulations. Use personal protection recommended in Section 8.</td>
</tr>
<tr>
<td>Contaminated packaging</td>
<td>Dispose of in accordance with federal, state and local regulations</td>
</tr>
<tr>
<td>US EPA waste number</td>
<td>No information available</td>
</tr>
<tr>
<td>Other information</td>
<td>Waste codes should be assigned by the user based on the application for which the product was used</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

14.1. UN number
Not regulated

14.2. UN proper shipping name
Not regulated

14.3. Transport hazard class(es)
Not regulated
14.4. Packing group
Not applicable

14.5. Environmental hazards
None

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

14.7. Special precautions for user
None

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

CWA (Clean Water Act) This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

International Inventories

TSCA Complies
DSL/NDSL -
EINECS/ELINCS -
ENCS -
IECSC Complies
KECL -
PICCS -
AICS Complies
NZIoC -

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations
California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol 64-17-5</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>1, 4 Dioxane 123-91-1</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Formaldehyde 50-00-0</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>50-00-0 (8.1e-006 %)</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

US State Regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol 64-17-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sodium hydroxide 1310-73-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
<td>Health hazards</td>
<td>Flammability</td>
<td>Instability</td>
<td>Special Hazard</td>
<td></td>
</tr>
</tbody>
</table>

Revision date 02-Jul-2019

Revision note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Material Safety Data Sheet