1. COMPANY AND PRODUCT IDENTIFICATION

Product Identifier
Product Name: QUAKECUT® 010 ES
Product code: 014240-01 02

Other means of identification
Synonyms: No information available.

Application
Recommended Use: Machining Fluid
Uses advised against: For industrial use only

Supplier/Manufacturer:
Supplier:
Quaker Chemical Corporation
Quaker Park One
901 Hector Street
Conshohocken, PA 19428
610-832-4000
E-mail: she@quakerchem.com

Emergency telephone number:
* 24 HOUR TRANSPORTATION:
** CHEMTREC: 1-800-424-9300
+703-527-3887 (Call collect outside of US)

* 24 HOUR EMERGENCY HEALTH & SAFETY:
** QUAKER CHEMICAL CORPORATION: (800) 523-7010
(Within US only) Outside of US call (703) 527-3887

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status
This chemical is not classified under the Globally Harmonized System

Label Elements

Emergency Overview

Appearance: Clear, Amber
Physical State: Liquid
Odor: Bland

Hazards not otherwise classified (HNOC)
None known

Other Information
None known.
Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>Proprietary</td>
<td>5 - 10%</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>Proprietary</td>
<td>1 - 5%</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**General advice:**
Take off all contaminated clothing immediately. Wash off with soap and water. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use.

**Eye contact:**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

**Skin contact:**
Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Rinse immediately with plenty of water for at least 15 minutes. If a person feels unwell or symptoms of skin irritation appear, consult a physician. Remove and wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water.

**Ingestion:**
If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**Inhalation:**
Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

**Note to physician:**
Treat symptomatically.

**Medical condition aggravated by exposure:**
Dermatitis and asthma.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**
Use dry chemical, CO2, water spray or `alcohol` foam.

**Specific hazards:**
Do not allow material to contaminate ground water system.

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

**Specific methods:**
Water mist may be used to cool closed containers.

### 6. ACCIDENTAL RELEASE MEASURES
Personal precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapour/dust. Wash thoroughly after handling.

Environmental precautions: Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling

Technical measures/precautions: Provide sufficient air exchange and/or exhaust in work rooms.

Safe handling advice: Do not breathe vapors or spray mist. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Storage

Technical measures/storage conditions: Store at room temperature in the original container

Incompatible products: Strong oxidizing agents

Safe storage temperature: 40-100 °F

Shelf life: 6 months

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH Exposure Limits</th>
<th>OSHA TWA (final)</th>
<th>NIOSH - Pocket Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>5 mg/ m³</td>
<td>5mg/ m³</td>
<td>5mg/ m³</td>
</tr>
</tbody>
</table>

Engineering measures: Ensure adequate ventilation.

Personal Protective Equipment:

General: Eye Wash and Safety Shower

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH-certified respirator with organic vapor/P100 filter should be worn.

Eye protection: Safety glasses with side-shields

Hand protection: Neoprene gloves
Skin and body protection: Long sleeved clothing

Hygiene measures: Avoid contact with skin, eyes and clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Bland</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH concentrate:</td>
<td>NA</td>
</tr>
<tr>
<td>pH Dilution</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>146 °C / 295 °F</td>
</tr>
<tr>
<td>Method</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content Product (g/L)</td>
<td>1.60 lb/gal (EPA Method 24)</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific Gravity (g/cc, 15 C)</td>
<td>0.866</td>
</tr>
<tr>
<td>Bulk Density (lb/gal, 15 C)</td>
<td>7.23</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
</tbody>
</table>

Revision Date: 05/29/2015
Decomposition Temperature
No information available

Kinematic viscosity
No information available

Dynamic viscosity
No information available

Molecular Weight
No information available

**10. STABILITY AND REACTIVITY**

**Stability:**
Stable under recommended storage conditions.

**Conditions to avoid:**
None known.

**Materials to avoid:**
Strong oxidizing agents.

**Hazardous decomposition products:**
Carbon oxides. Sulphur oxides.

**Hazardous Polymerization:**
Not applicable.

**11. TOXICOLOGICAL INFORMATION**

No toxicological information is available on the product. Data obtained on components are summarized below.

**Information on likely routes of exposure**

**Inhalation**
May cause irritation of respiratory tract.

**Eye Contact**
Contact with eyes may cause irritation.

**Skin Contact**
Prolonged contact may cause redness and irritation.

**Ingestion**
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

<table>
<thead>
<tr>
<th>Components</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>5000 mg/kg (Rat)</td>
<td>2000 mg/kg (Rabbit)</td>
<td>2.18 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Components</th>
<th>IARC Carcinogens</th>
<th>NTP</th>
<th>OSHA - Select Carcinogens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>Group 1 (Carcinogenic to Humans)</td>
<td>Not listed</td>
<td>Present</td>
</tr>
</tbody>
</table>

**Sensitization**
No information available.

**Mutagenic effects:**
No information available.

**Reproductive Toxicity**
No information available.
Additional information on toxicological effects
MINERAL OIL INFORMATION: Any product containing a substance for which OSHA has established a permissible exposure limit (PEL) is considered hazardous. OSHA has established a PEL of 5 mg/m³ for worker exposure to air borne mists of mineral oils. Therefore, the presence of mineral oils brings this product within the provisions of the OSHA Hazard Communication Standard where the PEL reaches or exceeds 5 mg/m³. Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Components</th>
<th>Ecotoxicity - Fish Species Data:</th>
<th>Ecotoxicity - Freshwater Algae Data:</th>
<th>Ecotoxicity - Water Flea Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>5005</td>
<td>&gt;1000mg/L</td>
<td>EC50 (Daphnia magna - 48h) = 1000 mg/L</td>
</tr>
</tbody>
</table>

5.77625% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

<table>
<thead>
<tr>
<th>Components</th>
<th>Octanol/water partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>-</td>
</tr>
</tbody>
</table>

Mobility: No data available

Ozone: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: Do not re-use empty containers
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

### 14. TRANSPORT INFORMATION

**U. S. DEPARTMENT OF TRANSPORTATION:**
- **Proper shipping name:** Not Regulated

**TDG (CANADA):**
- **Proper shipping name:** Not Regulated

**IMDG/IMO:**
- **Proper shipping name:** Not Regulated

**IATA/ICAO:**
- **Proper shipping name:** Not Regulated

### 15. REGULATORY INFORMATION

**Federal Regulations**

**OSHA Hazard Communication Standard:** This product is considered non-hazardous under the OSHA Hazard Communication Standard.

**CERCLA/SARA Information:**

**SARA (311, 312) hazard class:** This product possesses the following SARA Hazard Categories:

<table>
<thead>
<tr>
<th>Immediate Health (Acute)</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed Health (Chronic)</td>
<td>No</td>
</tr>
<tr>
<td>Flammability</td>
<td>No</td>
</tr>
<tr>
<td>Pressure</td>
<td>No</td>
</tr>
<tr>
<td>Reactivity</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Hazardous Substances and RQs</th>
<th>Extremely Hazardous Substances and TPQs</th>
<th>SARA 313 Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Clean Air and Clean Water Acts:**

<table>
<thead>
<tr>
<th>Components</th>
<th>Hazardous Air Pollutants</th>
<th>CWA - Hazardous Substances</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**U.S. STATE REGULATIONS (RTK):**

<table>
<thead>
<tr>
<th>Components</th>
<th>California Proposition 65</th>
<th>PARTK</th>
<th>MI Critical Materials</th>
<th>NJRTK</th>
<th>MARTK</th>
</tr>
</thead>
</table>

014240-01 02 - QUAKERCUT® 010

ES

Revision Date: 05/29/2015
**California Proposition 65 Status:** No components are listed

**RCRA Status:** Not regulated

**CANADIAN REGULATIONS:**

| Canada - WHMIS Classification Information: | This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR. |
| Canadian Product Classification: | None Required |
| Product Classification Graphic(s): | |

**Component Classification Data:**

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS hazard class</th>
<th>CEPA Schedule I</th>
<th>Challenge Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant</td>
<td>None</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Petroleum distillate</td>
<td>None</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**INVENTORY STATUS:**

| United States TSCA - Sect. 8(b) Inventory: | This product does not comply with TSCA |
| Canada DSL/NDSL Inventory List | Compliance has not been determined |

**16. OTHER INFORMATION**

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Quaker Chemical Corporation - Safety, Health and Environmental Affairs Group - US

Revision Date: 05/29/2015

Reason for revision: New Format.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

Disclaimer

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.
End of Safety Data Sheet