1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>LUBRICANT QXL METALWORKING FLUID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Not applicable</td>
</tr>
<tr>
<td>SDS number</td>
<td>METALWORKING FLUID</td>
</tr>
<tr>
<td>Recommended use</td>
<td>METALWORKING FLUID</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

Manufacturer/Importer/Supplier/Distributor information

<table>
<thead>
<tr>
<th>Company name</th>
<th>CIMCOOL® Industrial Products LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000 Disney Street</td>
<td>513-458-8100</td>
</tr>
<tr>
<td>Cincinnati, Ohio 45209</td>
<td></td>
</tr>
</tbody>
</table>

2. Hazard(s) identification

| Physical hazards | Not classified. |
| Health hazards   | Skin irritation  |
|                 | Category 2       |
| Health hazards   | Serious eye irritation |
|                 | Category 2       |
| Environmental hazards | Not classified. |
| OSHA defined hazards | Not classified. |

Label elements

Signal word: Warning
Hazard statement: Causes skin irritation. Causes serious eye irritation.
Precautionary statement:

**Prevention**

Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.

**Response**

If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. 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. Take off contaminated clothing and wash before reuse.

**Storage**

Store away from incompatible materials.

**Disposal**

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

**Hazard(s) not otherwise classified (HNOC)**

None known.
Supplemental information

21.34% of the mixture consists of component(s) of unknown acute oral toxicity. 55.39% of the mixture consists of component(s) of unknown acute dermal toxicity. 71.88% of the mixture consists of component(s) of unknown acute inhalation toxicity.

Container vapor space may contain hydrogen sulfide. May cause respiratory irritation.

This product should be mixed/diluted according to the manufacturer's recommendations and is intended for use only in closed or semi-enclosed machines. Semi-enclosed machines are machines that provide effective mist containment.

The classified hazards shown on this SDS are associated with the product concentrate. These hazards are not expected under recommended use conditions and dilution.

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>PENTENE, 2,4,4-TRIMETHYL-, SULFURIZED</td>
<td>68515-88-8</td>
<td>30 - 40</td>
<td></td>
</tr>
<tr>
<td>PETROLEUM SULFONIC ACID, SODIUM SALT</td>
<td>68608-26-4</td>
<td>10 - 20</td>
<td></td>
</tr>
<tr>
<td>ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED</td>
<td>68439-51-0</td>
<td>5 - 10</td>
<td></td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>102-71-6</td>
<td>5 - 10</td>
<td></td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC</td>
<td>64742-65-0</td>
<td>3 - 5</td>
<td></td>
</tr>
<tr>
<td>4,4-DIMETHYLOXAZOLIDINE</td>
<td>51200-87-4</td>
<td>1 - 3</td>
<td></td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>30 - 40</td>
<td></td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact
Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact
Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth thoroughly. Drink 1 or 2 glasses of water. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

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

General information
If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media
Alcohol resistant foam. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

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

Special protective equipment and precautions for firefighters
Wear suitable protective equipment.

Fire fighting equipment/instructions
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.
Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. 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
Local authorities should be advised if significant spillages cannot be contained. Use water spray to reduce vapors or divert vapor cloud drift. This product is miscible in water. Clean up in accordance with all applicable regulations.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. 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.

Environmental precautions
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling
Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - OSHA</td>
<td></td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Type</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)</td>
<td>TWA</td>
</tr>
<tr>
<td>US. ACGIH Threshold Limit Values</td>
<td>Type</td>
</tr>
<tr>
<td>TRIETHANOLAMINE (CAS 102-71-6)</td>
<td>TWA</td>
</tr>
</tbody>
</table>

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. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended.
Skin protection
- Use protective gloves made of: Nitrile.
- Hand protection
- Wear appropriate chemical resistant clothing.
- Other
- Respiratory protection
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Thermal hazards
- Wear appropriate thermal protective clothing, when necessary.
- General hygiene
- When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. 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: CLEAR
- Physical state: Liquid.
- Form: Liquid.
- Color: Not available.
- Odor: CHEMICAL
- Odor threshold: Not available.
- pH: Not Applicable
- Melting point/freezing point: < 5 °F (< -15 °C)
- Initial boiling point and boiling range: Not Applicable
- Flash point: 295 °F (146.1 °C)
- Evaporation rate: Like water when diluted
- Flammability (solid, gas): Not applicable.
- Upper/lower flammability or explosive limits
  - Flammability limit - lower (%): Not available.
  - Flammability limit - upper (%): Not available.
  - Explosive limit - lower (%): Not available.
  - Explosive limit - upper (%): Not available.
- Vapor pressure: Not available.
- Vapor density: Not available.
- Relative density: Not available.
- Solubility(ies): 100 % Water Miscible
- Partition coefficient (n-octanol/water): Not available.
- Auto-ignition temperature: Not available.
- Decomposition temperature: Not available.
- Viscosity: Not available.
- Other information
  - Explosive properties: Not explosive.
  - Flash point class: Combustible IIIB
  - Oxidizing properties: Not oxidizing.
  - pH in aqueous solution: 8.6 @ 5%
  - Specific gravity: 1.032
  - VOC ASTM D2369: 6 %

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 temperatures exceeding the flash point. Heat, flames and sparks. Contact with incompatible materials. May react with corroding cast, gray, nodular, or other high iron containing swarf or chips to form potentially hazardous levels of hydrogen sulfide.

Incompatible materials: Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.

Hazardous decomposition products: Smoke, fumes, oxides of nitrogen, oxides of sulfur, and oxides of carbon

11. Toxicological information

Information on likely routes of exposure:

- Inhalation: Not classified.
- Skin contact: Causes skin irritation.
- Eye contact: Causes eye irritation.
- Ingestion: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics: Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

Information on toxicological effects:

Acute toxicity: Not known.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4-DIMETHYLOXAZOLIDINE (CAS 51200-87-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Liquid</td>
<td>Rat</td>
</tr>
<tr>
<td>Dermal</td>
<td>Liquid</td>
<td>Rat</td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Liquid</td>
<td>Rat</td>
</tr>
<tr>
<td>Oral</td>
<td>Liquid</td>
<td>Rat</td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Liquid</td>
<td>Rat</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Mist</td>
<td>Rat</td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>Vapor</td>
<td>Rat</td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Liquid</td>
<td>Rabbit</td>
</tr>
</tbody>
</table>

Material name: LUBRICANT QXL
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**Test Results**

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Liquid</td>
<td>Rat</td>
<td>4190 mg/kg</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 eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  - Not a respiratory sensitizer.
- **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.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
- TRIETHANOLAMINE (CAS 102-71-6) Not classifiable as to carcinogenicity to humans.

- 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.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- Not an aspiration hazard.

**Chronic effects**
- May be harmful if absorbed through skin. Prolonged inhalation may be harmful.
  - Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

**Further information**
- The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

### 12. Ecological information

**Ecotoxicity**
- Contains a substance which causes risk of hazardous effects to the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4-DIMETHYLOXAZOLIDINE (CAS 51200-87-4) Aquatic Acute</td>
<td>Crustacea EC50 Daphnia</td>
<td>45 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish LC50 Bluegill (Lepomis macrochirus)</td>
<td>59 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

**ALCOHOLS, C12-14, ETHOXYLATED PROPOXYLATED (CAS 68439-51-0) Aquatic Acute**
- Crustacea EC50 Daphnia | 0.5 mg/l, 48 hours ATE |
- Fish LC50 Ide, silver or golden orfe (Leuciscus idus) | 1 - 10 mg/l, 96 hours |

**PENTENE, 2,4,4-TRIMETHYL-, SULFURIZED (CAS 68515-88-8) Aquatic Acute**
- Fish LC50 Zebrafish (Danio rerio) | > 100 mg/l, 96 hours |
Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE (CAS 102-71-6)</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td></td>
</tr>
<tr>
<td>EC50</td>
<td>565.2 - 658.3 mg/l, 48 hours</td>
</tr>
<tr>
<td>Water flea (Ceriodaphnia dubia)</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>450 - 1000 mg/l, 96 hours</td>
</tr>
<tr>
<td>Bluegill (Lepomis macrochirus)</td>
<td></td>
</tr>
</tbody>
</table>

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

Persistence and degradability

Bioaccumulative potential

- Partition coefficient n-octanol / water (log Kow)
  TRIETHANOLAMINE: -2.3

Mobility in soil
This product is miscible in water.

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. 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
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

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. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

- 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 regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

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SARA 302 Extremely hazardous substance  
Not listed.

SARA 311/312 Hazardous chemical  
Yes

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.

Food and Drug Administration (FDA)  
Not regulated.

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)

California South Coast Air Quality Management District (SCAQMD) Rule 1144 (VOC Emissions)  
This product is subject to SCAQMD Rule 1144; it is compliant and may be sold and used in the SCAQMD. The VOC content of the product is 45 g/L, measured by ASTM Method E-1868-10. This product has a specified use dilution VOC limit of 75 g/L, the maximum dilution concentration is 100 % to maintain compliance.

US. California Proposition 65  
WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory or exempt (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>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<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>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
</tbody>
</table>

United States & Puerto Rico  
Toxic Substances Control Act (TSCA) Inventory  
Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Issue date  
10-03-2014

Revision date  
06-05-2017

Version #  
03

Further information  
Not available.

NFPA ratings  
Health: 1  
Flammability: 1  
Instability: 0

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