1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME
CAT O-RING ASSEMBLY COMPOUND

PART No.
Chemtool, 8604100000, Caterpillar, 1U-6395, 1U-6396

PRODUCT USE
O-Ring Compound

SUPPLIER
Chemtool Incorporated
P.O. Box 538
8200 Ridgefield Road
Crystal Lake, IL  60039-0538 USA
Tel:  (815) 459-1250
Fax:  (815) 459-1955

EMERGENCY TELEPHONE
Rocky Mountain Poison Center
Denver, Colorado
In USA and Canada - (800) 458-5924
Outside USA and Canada - +01-303-893-1322

2. COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS No.</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOYBEAN OIL</td>
<td>8001-22-7</td>
<td>80-93 %</td>
</tr>
<tr>
<td>*SILICA (ALSO SILICA, AMORPHOUS, FUMED, CRYSTALLINE, CAS# 112945-52-5)</td>
<td>7631-86-9</td>
<td>7-20 %</td>
</tr>
</tbody>
</table>

* This chemical(s) is hazardous according to OSHA/WHIMIS criteria

COMPOSITION COMMENTS
Refer to section eight for exposure limits on ingredients.
Chemical ingredients not regulated by OSHA, SARA, state or federal agencies are treated confidentially.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Exposure to vapors generated at high temperatures may cause respiratory irritation.

SENSITIZATION
No known information.

CARCINOGENICITY
IARC: Not listed as a Group 1, 2A, or 2B agent. NTP: Not listed. OSHA: Not regulated.
TERATOGENICITY

No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

HEALTH WARNINGS

INGESTION. Can cause discomfort. INHALATION. Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product. EYE CONTACT. Slightly irritating. SKIN CONTACT. Repeated or prolonged contact can result in drying of the skin.

ROUTE OF ENTRY

Skin and/or eye contact. Ingestion. Inhalation.

4. FIRST AID MEASURES

INHALATION

Remove victim immediately from source of exposure. Get medical attention if any discomfort continues. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration.

EYES

Important! Immediately rinse with water for at least 15 minutes. Get medical attention if any discomfort continues.

SKIN

Remove contaminated clothing. Wash skin thoroughly with soap and water. Contact physician if irritation persists.

INGESTION

DO NOT induce vomiting. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

FLASH POINT (°C)  232 (450°F) Cd OC (Cleveland open cup).

FLAMMABILITY LIMIT - LOWER(%) N/D

FLAMMABILITY LIMIT - UPPER(%) N/D

FLAMMABILITY CLASS No Uniform Fire Code noted.

EXTINGUISHING MEDIA Use: Dry chemicals, sand, dolomite etc. Foam. Carbon dioxide (CO2).

SPECIAL FIRE FIGHTING PROCEDURES

Use water to keep fire exposed containers cool and disperse vapors. Prevent water from coming in contact with the product. Keep run-off water out of sewers and water sources. Dike for water control. Use special protective clothing. Regular protection may not be safe. Prevent inhalation of fumes and gases.

UNUSUAL FIRE & EXPLOSION HAZARDS

Volume and pressure increases strongly when heated. Risk of container explosion in fire.


PROTECTIVE MEASURES IN CASE OF FIRE

Self-contained breathing equipment and chemical resistant clothing recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Minimize skin contact. Remove sources of ignition.
SPILL CLEAN-UP PROCEDURES

Carefully collect spilled material in closed containers and leave for disposal according to local regulations. Provide good ventilation. Use appropriate protective clothing. Rinse area with water. Do not let washing down water contaminate ponds or waterways.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Containers to be kept tightly closed. Eye wash and emergency shower must be available at the work place.

STORAGE PRECAUTIONS


STORAGE CRITERIA

Chemical storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA</th>
<th>STEL</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOYBEAN OIL</td>
<td>SOYBEAN OIL</td>
<td>OSHA</td>
<td>15 mg/m³</td>
<td>5 mg/m³</td>
<td>N/A</td>
<td>(total dust)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>NIC 2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILICA (ALSO SILICA, AMORPHOUS, FUMED, CRYSSTALLINE, CAS# 112945-52-5)</td>
<td>SILICA (ALSO SILICA, AMORPHOUS, FUMED, CRYSSTALLINE, CAS# 112945-52-5)</td>
<td>ACGIH</td>
<td>6 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| COMPONENT | COMPONENT | | | | |
|-----------|-----------| | | | |

PROTECTIVE EQUIPMENT

ENGINEERING CONTROLS

Use engineering controls to reduce air contamination to permissible exposure level.

VENTILATION

No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

RESPIRATORS

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

PROTECTIVE GLOVES

Chemical resistant gloves required for prolonged or repeated contact. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC. or latex.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

PROTECTIVE CLOTHING

Wear appropriate clothing to prevent repeated or prolonged skin contact.

HYGIENIC WORK PRACTICES

Wash at the end of each work shift and before eating, smoking and using the toilet.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>Jelly-like.</td>
</tr>
<tr>
<td>Color</td>
<td>Amber.</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild (or faint).</td>
</tr>
<tr>
<td>Solubility Description</td>
<td>Insoluble in water.</td>
</tr>
<tr>
<td>Density</td>
<td>0.90</td>
</tr>
<tr>
<td>Temperature (°C)</td>
<td>15.6 (60°F)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 1 mmHg</td>
</tr>
<tr>
<td>Temperature (°C)</td>
<td>20 (68°F)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Reference</td>
<td>BuAc=1</td>
</tr>
<tr>
<td>pH-Value, Conc. Solution</td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Normally stable.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Avoid contact with strong oxidizers. Avoid excessive heat for prolonged periods of time.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not polymerize.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean Oil</td>
<td></td>
</tr>
<tr>
<td>Toxicological Data</td>
<td>Acute toxicity. LD50. Intraventral. Rat. 16500 mg/kg RTECS Reproductive effects. TDLo Intramuscular. Rat. 1000 mg/kg RTECS</td>
</tr>
<tr>
<td>Toxic Dose - LD 50</td>
<td>No Information Available (NIA).</td>
</tr>
<tr>
<td>Toxic Conc. - LC 50</td>
<td>No Information Available (NIA).</td>
</tr>
<tr>
<td>Silica (Also Silica, Amorphous, Fumed, Crystalline, CAS# 112945-52-5)</td>
<td></td>
</tr>
<tr>
<td>Toxicological Data</td>
<td>Irritating effects. Draize 24 hours. Eye. 0.7/110 Irritating effects. Draize Skin. 0/8</td>
</tr>
<tr>
<td>Toxic Dose - LD 50</td>
<td>&gt; 5000 mg/kg (oral rat)</td>
</tr>
<tr>
<td>Toxic Dose - LD 50 Skin</td>
<td>&gt; 2000 mg/kg (skn rbt)</td>
</tr>
<tr>
<td>Toxic Conc. - LC 50</td>
<td>N/A.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>NTP: Not listed. IARC-3 designation: Not classifiable as to Carcinogenicity to Humans.</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION  No data on possible environmental effects have been found.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS  Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS  Non-Hazardous (No label required).
TDGR CLASS  Not Regulated.
SEA TRANSPORT NOTES  Not regulated per IMDG.
AIR TRANSPORT NOTES  Not regulated per IATA.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>SARA 302</th>
<th>CERCLA</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOYBEAN OIL</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SILICA (ALSO SILICA, AMORPHOUS, FUMED, CRYSTALLINE, CAS# 112945-52-5)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CLEAN AIR ACT

SARA HAZARD CATEGORIES  None

US STATE REGULATIONS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CA</th>
<th>MA</th>
<th>FL</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
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<tbody>
<tr>
<td>SILICA (ALSO SILICA, AMORPHOUS, FUMED, CRYSTALLINE, CAS# 112945-52-5)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>HS</td>
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</table>

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

CONTROLLED PRODUCT CLASSIFICATION  Not a controlled product.
10018 - CAT O-RING ASSEMBLY COMPOUND

GLOBAL INVENTORIES

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAN</th>
<th>US</th>
<th>EU</th>
<th>AUS</th>
<th>JAP</th>
<th>KOR</th>
<th>PHLP</th>
<th>CHN</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOYBEAN OIL</td>
<td>DSL</td>
<td>Yes</td>
<td>EINECS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>SILICA (ALSO SILICA, AMORPHOUS, FUMED,</td>
<td>DSL</td>
<td>Yes</td>
<td>EINECS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CRYSTALLINE, CAS# 112945-52-5)</td>
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<td></td>
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</tbody>
</table>

CANADA CEPA: All components of this product comply with new substance notification requirements under the Canadian Environmental Protection Act (CEPA).

16. OTHER INFORMATION

NFPA-HMIS HAZARD RATING

HEALTH
Irritation, minor residual injury (1) - HMIS/NFPA

FLAMMABILITY
Burns only if pre-heated (1) - HMIS/NFPA

REACTIVITY
Normally Stable (0) - HMIS/NFPA

PERSONAL PROTECTION INDEX
B - Safety Eyewear and Gloves

REVISION COMMENTS
Section 11: Toxicological Information
Section 15: Inventory Status

PREPARED BY
John Dingess
James McBriarty

Replacement MSDS of
DATE
2008-10-06

PRINTING DATE:
2008-11-06

DISCLAIMER
While the information and recommendations set forth herein are believed to be accurate as of the date thereof, the company makes no warranty with respect thereto and disclaims all liability from reliance therein.

* Information revised since previous MSDS version