Steam Cylinder Oil NC 1000
Product Code: 643a

SECTION 1: PRODUCT IDENTIFICATION

Product Name Steam Cylinder Oil NC 1000
Product Code # 643a
CAS # Not applicable for mixtures
Manufacturer Royal Mfg Co, LP
Synonym Not applicable
Chemical Name Not applicable
Chemical Formula Not applicable
Trade Secret No
Address 516 S. 25th West Ave.
Tulsa, OK 74127
Phone (918) 584-2671
Emergency Contact CHEMTREC (24 hour Emergency Telephone), call: 1-800-424-9300
International CHEMTREC, call: 1-800-255-3924
Recommended Use Steam Cylinders
Restrictions on Use This product must not be used in applications other than recommended in Section 1 without taking the advice from supplier/manufacturer.

SECTION 2: HAZARD(S) IDENTIFICATION

Classifications: Aquatic Hazard – Acute: Category 3
Aquatic Hazard – Long-term: Category 4
Pictograms: None
Signal Word: None
Hazard Statements: Harmful to aquatic life.
May cause long lasting harmful effects to aquatic life.

Precautionary Statements: P101: If medical advice is needed have product container or label at hand
P102: Keep out of reach of children
P103: Read Label before use
P210: Keep away from Heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking.
P211: So not spray on an open flame or other ignition source.
P232: Protect from Moisture.
P233: Keep container tightly closed
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection
P404: Store in a closed container

Percent of the mixture consisting of ingredient(s) of unknown toxicity: None
SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Designation</th>
<th>CAS No.</th>
<th>% of Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil</td>
<td>64742-54-7</td>
<td>75 - 100%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

**Eyes:**
Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.

**Skin:**
Immediately remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

**Inhalation:**
Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration using a pocket mask type resuscitator. Call a physician immediately.

**Ingestion:**
Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

**Fire Hazard:**
No

**Flash Point °C (°F):**
> 93.0° (199.4°)

**Flammable Limits:**
LOWER: Not determined UPPER: Not determined

**Extinguishing Media:**
Water Mist
Foam
Dry Powder
CO2

**Special protective Equipment and firefighting procedures:**
Not determined

**Unusual Fire & Explosion:**
Not determined

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:**
Vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged container or spilled material unless wearing appropriate protective clothing/equipment. Ventilate the closed area.

**Spills / Leaks:**
Isolate the spill/leak area in all directions for about 50 meters (150 ft) for liquids and about 25 meters (75 ft) for solids and semi-solids. Eliminate all ignition sources (no smoking, flares, sparks/flames in close vicinity). Keep unauthorized persons away and ventilate closed space before entering.

SECTION 7: HANDLING & STORAGE

**Handling:**
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and prompt removal of material from eyes skin and clothing.

**Storage:**
Store in a sealed container in a cool, dry environment.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits:**
**OSHA Permissible**
5 mg/m³

**Threshold Limit Values (TLVs):**
10 mg/m³

**Engineering Controls:**
If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.
**Personal Protective Equipment:**

**Face:** The use of face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

**Eyes:** Safety Glasses

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile

**Respiratory:** Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator.

**Pictograms:**

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
<td>Amber Liquid</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Petroleum</td>
</tr>
<tr>
<td><strong>Odor Threshold:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Melting Point °C (°F):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Freezing Point °C (°F):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Pour Point °C (°F):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Boiling Range:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Flash Point °C (°F):</strong></td>
<td>&gt; 93.0° (199.4°)</td>
</tr>
<tr>
<td><strong>Flash Point Method:</strong></td>
<td>ASTM D92</td>
</tr>
<tr>
<td><strong>Evaporation Rate:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Upper Flammability/Explosive Limit:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Lower Flammability/Explosive Limit:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor Density:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor Temperature °C (°F):</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Relative Density/Specific Gravity:</strong></td>
<td>0.9100</td>
</tr>
<tr>
<td><strong>Solubility:</strong></td>
<td>Not Water Soluble</td>
</tr>
<tr>
<td><strong>Partition Coefficient:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity (cSt):</strong></td>
<td>971.00 @ 40° C</td>
</tr>
<tr>
<td><strong>VOC Content:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>VOC Less Water &amp; Exempts:</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

### SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical Reactivity:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Chemical Stability:</strong></td>
<td>Stable under normal ambient temperature and conditions.</td>
</tr>
<tr>
<td><strong>Conditions to Avoid:</strong></td>
<td>Extreme temperature and direct sunlight/heat/flame</td>
</tr>
<tr>
<td><strong>Materials to Avoid:</strong></td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td><strong>Hazardous Decomposition:</strong></td>
<td>Not expected</td>
</tr>
</tbody>
</table>

### SECTION 11: TOXICOCLOGICAL INFORMATION

**Inhalation**

**Description of effects from short- and long-term exposure:** Not known

**Description of symptoms:** Not known

**Measure of toxicity:** Not known

**Ingestion**

**Description of effects from short- and long-term exposure:**
Steam Cylinder Oil NC 1000
Date issued: 7-Jun-17

Not known
Description of symptoms:
May cause nausea and vomiting.
Measure of toxicity:
Not known

Eyes
Description of effects from short- and long-term exposure:
Not known
Description of symptoms:
Contact may cause eye irritation.
Measure of toxicity:
Not known

Skin
Description of effects from short- and long-term exposure:
Not known
Description of symptoms:
Prolonged or repeated skin contact may cause irritation.
Measure of toxicity:
Not known

Carcinogens listing:
NTP: No
IARC: No
OSHA: No
GHS: No

Chronic Toxicity: No

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: No data available
Biodegradability: No data available
Bioaccumulation: No data available

SECTION 13: DISPOSAL CONSIDERATION

Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations. Regulations may vary by location.

SECTION 14: TRANSPORT INFORMATION

UN Number: Not regulated in transportation by DOT/IMO/IATA. Not classified as dangerous in the meaning of transport regulation.
Proper Shipping Name: Steam Cylinder Oil NC 1000

Pictograms:

SECTION 15: REGULATORY INFORMATION

OSHA Regulated Hazard: No
DOT Regulated: No
E C Classification: Non-applicable
TSCA Status: In compliance with TSCA inventory requirements for commercial purposes
Steam Cylinder Oil NC 1000

Date issued: 7-Jun-17

SARA 312 Regulated Chemical(s): No
SARA 313 Regulated Chemical(s): No
EPA Registration Number: Non-applicable
California Prop. 65: None
PA Right to know Chemical(s): None known
NJ Right to know Chemical(s): None known
Additional State Regulations: None known
Canada: Non-applicable

SECTION 16: OTHER INFORMATION

The above Information is based on the present state of our knowledge of the product at the time of publication. No warranty is implied with respect to the quality or the specification of the product and the user must satisfy themselves that the product is entirely suitable for their purposes.

DISCLAIMER This SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Royal Mfg Co, LP to be dependable and is accurate to the best of the company's knowledge. The information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. Royal Mfg Co, LP assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

End of SDS