SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO 555 DOD-PRF-85734
TURBINE ENGINE & HELICOPTER TRANSMISSION OIL

Product Use Description: Lubricant

Company: Manufacturer
Anderol Specialty Lubricants, a division of Lanxess Solutions US Inc.
215 Merry Lane
East Hanover, NJ
07936
United States of America (USA)
Telephone: +1 203-573-4596, Toll Free: +1 888-263-3765
Email: msdsrequest@chemtura.com
Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
: US : 800-292-5898 (Technical inquiries)
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by Product Safety Department
(US) +1 866-430-2775
MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION

Form liquid
Colour amber
Odour mild

GHS Classification
Reproductive toxicity : Category 2
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS label elements
Signal word : Warning
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Version: 1.6  Revision Date: 12/08/2017  Print Date: 01/19/2018

Hazard pictograms:

Hazard statements:
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Other hazards:
None

Precautionary statements:
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene</td>
<td>68411-46-1</td>
<td>&gt;= 1 - &lt; 2.5 %</td>
</tr>
<tr>
<td>tris(methylphenyl) phosphate</td>
<td>1330-78-5</td>
<td>&gt;= 0.25 - &lt; 1 %</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

If inhaled:
If inhaled
Move to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
In case of bluish discoloration (lips, ear lobes, fingernails), give oxygen as quickly as possible.
If symptoms persist, call a physician.

In case of skin contact:
- Wash off with soap and water.
- Remove contaminated clothing and shoes.
- Wash contaminated clothing before re-use.
- Get medical attention if irritation develops and persists.

In case of eye contact:
- Rinse thoroughly with plenty of water, also under the eyelids.
- If eye irritation persists, consult a specialist.

If swallowed:
- DO NOT induce vomiting.
- Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed:
- None known.

Notes to physician:
- For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
- Carbon dioxide (CO2)
- Dry powder
- Foam
- Alcohol-resistant foam
- Water mist

Unsuitable extinguishing media:
- High volume water jet

Specific hazards during firefighting:
- Burning produces noxious and toxic fumes.

Specific extinguishing methods:
- In the event of fire, cool tanks with water spray.

Special protective equipment for firefighters:
- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.
- Ensure adequate ventilation.
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Environmental precautions: Should not be released into the environment. Do not contaminate water. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Keep container closed when not in use. Do not use pressure to empty drums. Ensure all equipment is electrically grounded before beginning transfer operations.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid: Strong acids and strong bases.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures: Effective exhaust ventilation system. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection: Breathing apparatus needed only when aerosol or mist is formed. In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks: Neoprene gloves

Eye protection: Safety glasses with side-shields. Tightly fitting safety goggles

Skin and body protection: Impervious clothing

Hygiene measures: Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety.
practice.
Wash hands before breaks and at the end of workday.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>amber</td>
</tr>
<tr>
<td>Odor</td>
<td>mild</td>
</tr>
<tr>
<td>Odour Threshold</td>
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<tr>
<td>pH</td>
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<td>Melting point/range</td>
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<tr>
<td>Boiling point/boiling range</td>
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<tr>
<td>Evaporation rate</td>
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<tr>
<td>Flash point</td>
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<td>Method: ASTM D92</td>
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<tr>
<td>Upper explosion limit</td>
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<tr>
<td>Lower explosion limit</td>
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<td>Vapour pressure</td>
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<tr>
<td>Relative density</td>
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<tr>
<td>Density</td>
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</tr>
<tr>
<td>Solubility(ies)</td>
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</tr>
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<td>Water solubility</td>
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<td>Solubility in other solvents</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: Hazardous polymerisation does not occur.
Conditions to avoid: Contamination, Heat, flames and sparks.
Incompatible materials: Strong acids and strong bases
Hazardous decomposition products: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method
Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:
Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401
Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Components:
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Components:
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:
Species: Rabbit
Result: No eye irritation  
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Components:
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:  
Species: Guinea pig  
Assessment: Did not cause sensitisation on laboratory animals.  
Method: OECD Test Guideline 406

Germ cell mutagenicity

Components:
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:  
Germ cell mutagenicity: Not mutagenic in Ames Test  
Assessment  
tris(methylphenyl) phosphate:  
Germ cell mutagenicity: In vitro tests did not show mutagenic effects  
Assessment

Carcinogenicity

Components:
tris(methylphenyl) phosphate:  
Carcinogenicity: Animal testing did not show any carcinogenic effects.  
Assessment

Reproductive toxicity

Components:
tris(methylphenyl) phosphate:  
Effects on foetal development: Species: Rat  
Application Route: Oral  
Developmental Toxicity: NOEL: 20 mg/kg  
Reproductive toxicity: Suspected of damaging fertility or the unborn child.  
Assessment  
Did not show teratogenic effects in animal experiments.

Aspiration toxicity

Product:
No aspiration toxicity classification

Further information

Product:
Remarks: There is no data available for this product.
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Product) : Remarks: No data available

Toxicity to algae (Product) : Remarks: No data available

Toxicity to bacteria tris(methylphenyl) phosphate (Component) : EC50: > 100 mg/l
Exposure time: 3 h
Species: activated sludge
Respiration inhibition

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks: No data available

Mobility (Product) : Remarks: No data available

Biodegradability (Product) : Result: No data available

Ecotoxicology Assessment

Results of PBT assessment (Product)
This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : In accordance with local and national regulations.
Contaminated packaging: Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>amitrole</td>
<td>61-82-5</td>
<td>10</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA304 Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: Reproductive toxicity

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
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SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations
California Prop 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

The components of this product are reported in the following inventories:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>All components on the Canadian DSL</td>
</tr>
<tr>
<td>AICS</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>NZIoC</td>
<td>Not in compliance with the inventory</td>
</tr>
<tr>
<td>ENCS</td>
<td>Not in compliance with the inventory</td>
</tr>
<tr>
<td>KECI</td>
<td>Not in compliance with the inventory</td>
</tr>
<tr>
<td>PICCS</td>
<td>Not in compliance with the inventory</td>
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<tr>
<td>IECSC</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>TCSI</td>
<td>On the inventory, or in compliance with the inventory</td>
</tr>
<tr>
<td>US.TSCA</td>
<td>On TSCA Inventory</td>
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</table>

SECTION 16. OTHER INFORMATION

Further information

Other Emergency Phone Number

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>Brazil</td>
<td>+55 113 711 9144</td>
</tr>
<tr>
<td></td>
<td>All other countries</td>
<td>+44 (0) 1235 239 670</td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td>+52 555 004 8763</td>
</tr>
</tbody>
</table>

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.