

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

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

Product Use Description: Lubricant

Synonyms: Synthetic Lubricant Formulation

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@lanxess.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

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

Signal word : **Warning**

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:

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

| Chemical name | CAS-No. | Concentration (%) |
|---------------|---------|-------------------|
|---------------|---------|-------------------|

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

|   |            |                      |
|---|------------|----------------------|
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | 68411-46-1 | $\geq 1 - < 2.5 \%$  |
| tris(methylphenyl) phosphate  | 1330-78-5  | $\geq 0.25 - < 1 \%$ |

### 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 discolouration (lips, ear lobes, fingernails), give oxygen as quickly as possible.  
If symptoms persist, call a physician.
- In case of skin contact : 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 : In case of eye contact  
Rinse thoroughly with plenty of water, also under the eyelids.  
If eye irritation persists, consult a specialist.
- If swallowed : 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 (CO<sub>2</sub>)  
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 : In the event of fire, cool tanks with water spray.

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

methods

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.

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

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

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

Appearance

: liquid

Color

: amber

Odor

: mild

Odour Threshold

: No data available

pH

: No data available

Melting point/range

:  
Not applicable

Boiling point/boiling range

: No data available

Evaporation rate

: No data available

Flash point

: > 246 °C  
Method: ASTM D92

Upper explosion limit

: No data available

Lower explosion limit

: No data available

Vapour pressure

: No data available

Relative vapour density

: No data available

Relative density

: 0.99

Density

: No data available

Solubility(ies)

Water solubility

: slightly soluble

Solubility in other solvents

: No data available

Partition coefficient: n-

: No data available

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

octanol/water

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

### 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): > 5,000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

### 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

#### **IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### **NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

by NTP.

### Reproductive toxicity

#### Components:

##### **tris(methylphenyl) phosphate:**

Effects on foetal development : Species: Rat  
Application Route: Oral  
Developmental Toxicity: NOEL: 20 mg/kg

Reproductive toxicity - Assessment : Suspected of damaging fertility or the unborn child.  
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

#### Product:

Toxicity to fish :  
Remarks: No data available

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

Toxicity to algae :  
Remarks: No data available

#### Components:

##### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 71 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 51 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202



# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

Toxicity to algae : EbC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

### **tris(methylphenyl) phosphate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.75 mg/l  
Exposure time: 96 h  
  
LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.6 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.146 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

EC50 (Daphnia magna (Water flea)): 0.27 mg/l  
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition

### **Persistence and degradability**

#### **Product:**

Biodegradability : Result: No data available

#### **Components:**

##### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Biodegradability : Result: According to the results of tests of biodegradability this product is not readily biodegradable.  
Method: CO2 Evolution Test

### **Bioaccumulative potential**

#### **Product:**

Bioaccumulation : Remarks: No data available

#### **Components:**

##### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Partition coefficient: n- : log Pow: > 7

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

octanol/water

### **tris(methylphenyl) phosphate:**

Partition coefficient: n-  
octanol/water : Pow: 5.93

### **Mobility in soil**

#### **Product:**

Mobility : Remarks: No data available

### **Other adverse effects**

#### **Product:**

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

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

### **Components:**

#### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Additional ecological  
information : Harmful to aquatic organisms, may cause long-term adverse  
effects in the aquatic environment.  
Do not allow material to contaminate ground water system.  
Do not flush into surface water or sanitary sewer system.

## 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**

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

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

| Components | CAS-No. | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|------------|---------|-----------------------|--------------------------------|
| amitrole   | 61-82-5 | 10                    | *                              |

\*: 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.

**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

WARNING: This product can expose you to chemicals including amitrole, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

# SAFETY DATA SHEET



## ROYCO 555 DOD-PRF-85734

Version: 1.7

Revision Date: 07/11/2018

Print Date: 04/02/2020

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:

|         |  |
|---------|--|
| DSL     | All components of this product are on the Canadian DSL |
| AICS    | On the inventory, or in compliance with the inventory  |
| NZIoC   | Not in compliance with the inventory                   |
| ENCS    | Not in compliance with the inventory                   |
| KECI    | Not in compliance with the inventory                   |
| PICCS   | Not in compliance with the inventory                   |
| IECSC   | On the inventory, or in compliance with the inventory  |
| TCSI    | On the inventory, or in compliance with the inventory  |
| US.TSCA | On TSCA Inventory                                      |

### SECTION 16. OTHER INFORMATION

#### Further information

#### Other Emergency Phone Number

|                       |                     |                      |
|-----------------------|---------------------|----------------------|
| <u>Latin America:</u> | Brazil              | +55 113 711 9144     |
|                       | All other countries | +44 (0) 1235 239 670 |
| <u>Mexico:</u>        |                     | +52 555 004 8763     |

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.