

# SAFETY DATA SHEET



## ROYCO 808 MIL-PRF-7808

Version: 1.6

Revision Date: 07/11/2018

Print Date: 04/02/2020

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO 808 MIL-PRF-7808  
LOW VISCOSITY TURBINE ENGINE 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	clear
Odour	mild

#### GHS Classification

Skin sensitisation : Category 1  
Reproductive toxicity : Category 2  
Specific target organ toxicity - repeated exposure : Category 2  
Acute aquatic toxicity : Category 2  
Chronic aquatic toxicity : Category 2

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### GHS label elements

Signal word : **Warning**

Hazard pictograms : 

Hazard statements : H317 May cause an allergic skin reaction.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic 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.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.  
**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

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### NTP

equal to 0.1% is on OSHA's list of regulated carcinogens. 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 (%)
tris(methylphenyl) phosphate	1330-78-5	>= 1 - < 2.5 %
NJTS-46728100000-0001		>= 1 - < 2.5 %
N-1-naphthylaniline	90-30-2	>= 1 - < 2.5 %
2,6-di-tert-butyl- $\alpha$ -dimethylamino-p-cresol	88-27-7	>= 0.1 - < 0.25 %

## 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 : 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.

## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Foam  
Alcohol-resistant foam  
Water mist

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- 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.
- 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 : Handle in accordance with good industrial hygiene and safety practice. 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

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Components	CAS-No.	Form of exposure	Permissible concentration	Basis
N-1-naphthylaniline	90-30-2	TWA	10 ml/m3	ACGIH

**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.  
Provide adequate ventilation.  
Do not breathe dust or spray mist.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : clear

Odor : mild

Odour Threshold : No data available

pH : Not applicable

Melting point/range :  
Not applicable

Boiling point/boiling range : No data available

Evaporation rate : No data available

Flash point : > 210 °C  
Method: open cup

Upper explosion limit : No data available

Lower explosion limit : No data available

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Vapour pressure : No data available  
Relative vapour density : No data available  
Relative density : 0.95  
Solubility(ies)  
Water solubility : slightly soluble  
Solubility in other solvents : No data available  
  
Partition coefficient: n-octanol/water : No data available  
Auto-ignition temperature : not determined  
  
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 : Heat  
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

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### 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

#### **N-1-naphthylaniline:**

Acute oral toxicity : LD50 (Rat): 1,625 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

#### **2,6-di-tert-butyl- $\alpha$ -dimethylamino-p-cresol:**

Acute oral toxicity : LD50 (Rat): 1,030 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 4,000 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

#### **N-1-naphthylaniline:**

Species: Rabbit  
Method: Draize Test  
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

#### **N-1-naphthylaniline:**

Species: Rabbit  
Result: No eye irritation  
Method: OECD Test Guideline 405

#### **2,6-di-tert-butyl- $\alpha$ -dimethylamino-p-cresol:**

Result: Mild eye irritation

### **Respiratory or skin sensitisation**

#### Components:

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

Species: Guinea pig

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Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 406

### **N-1-naphthylaniline:**

Test Type: Maximisation Test

Species: Guinea pig

Result: Probability or evidence of low to moderate skin sensitisation rate in humans

Test Type: Patch Test

Species: Human

Result: Probability or evidence of low to moderate skin sensitisation rate in humans

Test Type: Maximisation Test

Species: Guinea pig

Result: Probability or evidence of low to moderate skin sensitisation rate in humans

### **Germ cell mutagenicity**

#### **Components:**

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

Germ cell mutagenicity - : In vitro tests did not show mutagenic effects

Assessment

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

Germ cell mutagenicity - : Not mutagenic in Ames Test

Assessment

#### **N-1-naphthylaniline:**

Genotoxicity in vitro : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Result: negative

: Test Type: Chinese Hamster Ovary (CHO)  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Mouse (male)

Result: negative

Germ cell mutagenicity - : Animal testing did not show any mutagenic effects., Tests on  
Assessment bacterial or mammalian cell cultures did not show mutagenic effects.

### **Carcinogenicity**

#### **Components:**

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

Carcinogenicity - : Animal testing did not show any carcinogenic effects.

Assessment

#### **N-1-naphthylaniline:**



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Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

**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.

### 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.

### STOT - repeated exposure

#### Components:

##### **N-1-naphthylaniline:**

Exposure routes: Oral  
Target Organs: Liver, Kidney  
Assessment: May cause damage to organs through prolonged or repeated exposure.

### Aspiration toxicity

#### Product:

No aspiration toxicity classification

### Further information

#### Product:

Remarks: There is no data available for this product.

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## SECTION 12. ECOLOGICAL INFORMATION

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### 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:

##### **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 : EC50 (Daphnia magna (Water flea)): 0.146 mg/l  
aquatic invertebrates 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 : 1  
toxicity)

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

##### **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 : EC50 (Daphnia magna (Water flea)): 51 mg/l  
aquatic invertebrates Exposure time: 48 h  
Method: OECD Test Guideline 202

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

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### **N-1-naphthylaniline:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.44 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.68 mg/l  
Exposure time: 48 h  
Test Type: semi-static test  
Analytical monitoring: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.02 mg/l  
Exposure time: 21 d  
Analytical monitoring: yes

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (Protozoa): 2 mg/l  
Exposure time: 48 h  
  
EC50 (Bacteria): > 10,000 mg/l  
Exposure time: 3 h

### **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

#### **N-1-naphthylaniline:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 100 mg/l  
Result: According to the results of tests of biodegradability this product is not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301  
GLP: yes

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### Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: No data available

#### Components:

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

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

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

Partition coefficient: n-octanol/water : log Pow: > 7

##### **N-1-naphthylaniline:**

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): 427 - 2,730  
Exposure time: 56 d  
Temperature: 77 °F / 25 °C  
Concentration: 0.1 mg/l

Partition coefficient: n-octanol/water : log Pow: 4.28

### 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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

#### 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.

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### 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

##### IATA-DGR

- UN/ID No. : UN 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(tris(methylphenyl) phosphate, Phenyl-alpha-naphthylamine)
- Class : 9
- Packing group : III
- Labels : Miscellaneous

##### IMDG-Code

- UN number : UN 3082
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(tris(methylphenyl) phosphate, Phenyl-alpha-naphthylamine)
- Class : 9
- Packing group : III
- Labels : 9
- EmS Code : F-A, S-F
- Marine pollutant : yes

#### 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

- UN/ID/NA number : UN 3082
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID,  
N.O.S.  
(tris(methylphenyl) phosphate, Phenyl-alpha-naphthylamine)
- Class : 9
- Packing group : III
- Labels : CLASS 9
- ERG Code : 171
- Marine pollutant : yes(tris(methylphenyl) phosphate, Phenyl-alpha-naphthylamine)

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### SECTION 15. REGULATORY INFORMATION

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

##### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
1-naphthylamine	134-32-7	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
aniline	62-53-3	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards** : Respiratory or skin sensitisation  
Reproductive toxicity  
Specific target organ toxicity (single or repeated exposure)

**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 aniline, 1-naphthylamine, 2-naphthylamine, 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).

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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	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or 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

Latin America:	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
Mexico:		+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.