



SAFETY DATA SHEET

ROYCO 481 MIL-PRF-6081D

Version: 1.6

Revision Date: 01/04/2018

Print Date: 03/13/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO 481 MIL-PRF-6081D

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

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:

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	light yellow
Odour	hydrocarbon-like

GHS Classification

Aspiration hazard : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS label elements

Signal word : **Danger**

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Hazard pictograms

:



Hazard statements

: H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Other hazards

None

Precautionary statements

: **Prevention:**
P273 Avoid release to the environment.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
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 (%)
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 70 - < 90 %
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	>= 30 - < 50 %
2,6-di-tert-butyl-p-cresol	128-37-0	>= 0.25 - < 1 %

SECTION 4. FIRST AID MEASURES

If inhaled

: If inhaled
Move to fresh air.



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- 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.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : No information available.

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



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- 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

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
		PEL (particulate)	5 mg/m3	CAL PEL
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	TWA (Inhalable)	5 mg/m3	ACGIH



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		fraction)		
2,6-di-tert-butyl-p-cresol	128-37-0	TWA	10 mg/m3	OSHA P0
		TWA (Inhalable fraction and vapor)	2 mg/m3	ACGIH
		TWA (Inhalable fraction and vapor)	2 mg/m3	ACGIH
		TWA	10 mg/m3	NIOSH REL
		PEL	10 mg/m3	CAL PEL

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 : light yellow

Odor : hydrocarbon-like

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 : 143 °C
Method: open cup

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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 : 0.88
Density : No data available
Solubility(ies)
Water solubility : slightly soluble
Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : No data available

Viscosity
Viscosity, kinematic : 10 mm²/s (40 °C)

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

Components:



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2,6-di-tert-butyl-p-cresol:

Acute oral toxicity : LD50 (Rat, male and female): > 2,930 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Components:

2,6-di-tert-butyl-p-cresol:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Components:

2,6-di-tert-butyl-p-cresol:

Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Components:

2,6-di-tert-butyl-p-cresol:

Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

2,6-di-tert-butyl-p-cresol:

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

: Test Type: Chromosome aberration test in vitro
Result: Conflicting results have been seen in different studies.

: Test Type: unscheduled DNA synthesis assay
Result: negative

: Test Type: In vitro mammalian cell gene mutation test
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow
Method: Mutagenicity (micronucleus test)



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Result: negative

Test Type: in vivo assay

Species: Rat (male)

Cell type: Bone marrow

Application Route: Oral

Method: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)

Result: negative

Germ cell mutagenicity -
Assessment

: Animal testing did not show any mutagenic effects.

Carcinogenicity

IARC

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OSHA

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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:

2,6-di-tert-butyl-p-cresol:

Reproductive toxicity -
Assessment

: No toxicity to reproduction
No effects on or via lactation

STOT - repeated exposure

Components:

2,6-di-tert-butyl-p-cresol:

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Components:

Distillates (petroleum), hydrotreated light naphthenic:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: There is no data available for this product.



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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

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks:
No data available

Mobility (Product) : Remarks:
No data available

Biodegradability
2,6-di-tert-butyl-p-cresol (Component) : aerobic
Result: According to the results of tests of biodegradability this product is not readily biodegradable.
4.5 %

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.



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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

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

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

SARA 311/312 Hazards : Aspiration hazard

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

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



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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	Not in compliance with the inventory
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	On the inventory, or 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.