

# SAFETY DATA SHEET



## ROYCO 308CA MIL-PRF-32033

Version 1.12      Revision Date: 07/05/2019      SDS Number: 000000034818      Date of last issue: 07/11/2018  
Date of first issue: 10/01/2014

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### SECTION 1. IDENTIFICATION

Product name: ROYCO 308CA MIL-PRF-32033  
GENERAL PURPOSE, WATER-DISPLACING 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

Restrictions on use : Reserved for industrial and professional use.

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### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with 29 CFR 1910.1200

Aspiration hazard : Category 1

Short-term (acute) aquatic hazard : Category 3

Long-term (chronic) aquatic hazard : Category 3

#### GHS label elements

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Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

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

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.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture

:

Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 70 - < 90
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	>= 30 - < 50
calcium bis(dinonylnaphthalenesulphonate)	57855-77-3	>= 1 - < 5
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.  
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

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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.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.
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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Alcohol-resistant foam  
Water mist
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Burning produces noxious and toxic fumes.
- Further information : 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.
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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Forms slippery/greasy layers with water.
- 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)

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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.
- Further information on storage stability : Stable under recommended storage conditions.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / 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
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	TWA (Inhalable fraction)	5 mg/m3	ACGIH
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	10 mg/m3	NIOSH REL

**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

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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.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear

Odour : slight, hydrocarbon-like

Odour Threshold : No data available

pH : Not applicable

Melting point/range : Not applicable

Boiling point/boiling range : No data available

Flash point : 275 °F / 135 °C  
Method: open cup

Evaporation rate : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Density : 0.89 g/cm<sup>3</sup> (68 °F / 20 °C)

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

Self-Accelerating decomposition temperature (SADT) : Method: No information available.

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Viscosity  
Viscosity, kinematic : 11.61 mm<sup>2</sup>/s (104 °F / 40 °C)

Oxidizing potential : No information available.

Molecular weight : No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : No decomposition if stored and applied as directed.

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

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**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Eye contact  
Skin contact  
Skin Absorption

**Acute toxicity****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 15 mg/l  
Test atmosphere: dust/mist  
Method: Expert judgement

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

**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

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**Skin corrosion/irritation****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Species : Rabbit  
Result : Irritating to skin.  
Remarks : see user defined free text

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

Species : Rabbit  
Result : No skin irritation

**Serious eye damage/eye irritation****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Species : Rabbit  
Result : Irritating to eyes.

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

Species : Rabbit  
Result : No eye irritation

**Respiratory or skin sensitisation****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Test Type : Patch Test  
Species : Humans  
Assessment : Did not cause sensitisation on laboratory animals.

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

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

**Germ cell mutagenicity****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Genotoxicity in vitro : Test Type: Ames test  
Result: negative  
Remarks: Information given is based on data obtained from similar substances.

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

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**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)  
Result: negative
- Test Type: in vivo assay  
Species: Rat (male)  
Cell type: Bone marrow  
Application Route: Oral  
Method: Mutagenicity (in vivo mammalian bone-marrow cyto-genetic test, chromosomal analysis)  
Result: negative
- Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**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.

**Reproductive toxicity****Components:****2,6-di-tert-butyl-p-cresol:**

- Reproductive toxicity - Assessment : No toxicity to reproduction  
No effects on or via lactation



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**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 : No data is available on the product itself.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish :  
Remarks: No data available

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

**Persistence and degradability****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Biodegradability : Result: According to the results of tests of biodegradability this product is not readily biodegradable.  
Remarks: Information given is based on data obtained from similar substances.

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

Biodegradability : aerobic  
Inoculum: activated sludge  
Concentration: 50 mg/l  
Result: According to the results of tests of biodegradability this product is not readily biodegradable.  
Biodegradation: 4.5 %  
Exposure time: 28 d

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**Bioaccumulative potential****Components:****calcium bis(dinonylnaphthalenesulphonate):**

Partition coefficient: n-octanol/water : log Pow: 10.96  
Method: estimated

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

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): 230 - 2,500  
Exposure time: 56 d  
Temperature: 77 °F / 25 °C  
Concentration: 0.05 mg/l

Partition coefficient: n-octanol/water : log Pow: 5.1  
GLP: yes

log Pow: 4.2

**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 : No information on ecology is available.

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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.

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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**

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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

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**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.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

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

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Aspiration hazard

**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.

**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.

**California List of Hazardous Substances**

Distillates (petroleum), hydrotreated light naphthenic 64742-53-6

**California Permissible Exposure Limits for Chemical Contaminants**

Distillates (petroleum), hydrotreated light naphthenic 64742-53-6

**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 : On the inventory, or in compliance with the inventory

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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 : All substances listed as active on the TSCA inventory

### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16. OTHER INFORMATION

### Further information

#### Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 11 3197 5891
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 55 5004 8763

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
NIOSH REL : USA. NIOSH Recommended Exposure Limits  
OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000  
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants  
ACGIH / TWA : 8-hour, time-weighted average  
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek  
NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday  
OSHA P0 / TWA : 8-hour time weighted average  
OSHA Z-1 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification

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System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 07/05/2019

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.

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