

SAFETY DATA SHEET

ROYCO 308CA MIL-PRF-32033



Version	Revision Date:	SDS Number:	Date of last issue: 06/05/2020
1.15	07/22/2020	000000034818	Date of first issue: 10/01/2014

SECTION 1. IDENTIFICATION

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

Product Use Description: Lubricant

Synonyms: Synthetic Lubricant Formulation

Company: LANXESS Solutions US Inc.
2 Armstrong Road
Shelton, CT
06484
United States of America (USA)
Telephone: (US) +1 866-430-2775

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.

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	>= 0.1 - < 1

Actual concentration is withheld as a trade secret.

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.

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- 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.
- 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 (CO₂)
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 : Contain spillage, soak up with non-combustible absorbent
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containment and cleaning up 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.

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/m ³	OSHA Z-1
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL
		TWA (Mist)	5 mg/m ³	OSHA P0
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
2,6-di-tert-butyl-p-cresol	128-37-0	TWA	10 mg/m ³	OSHA P0
		TWA (Inhalable fraction and vapor)	2 mg/m ³	ACGIH
		TWA	10 mg/m ³	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

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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
Colour	:	clear
Odour	:	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
Relative density	:	0.89 (68 °F / 20 °C)
Density	:	0.89 g/cm ³ (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

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Auto-ignition temperature : not determined

Decomposition temperature : No data available

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

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : 11.61 mm²/s (104 °F / 40 °C)
 Method: ASTM D 445

Oxidizing potential : No information available.

Molecular weight : No data available

Dust explosion class : No data available

Metal corrosion rate : No data available

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

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact
Skin Absorption

Acute toxicity

Components:

Distillates (petroleum), hydrotreated light naphthenic:

Acute oral toxicity : LD50 Oral: > 5,000 mg/kg

calcium bis(dinonylnaphthalenesulphonate):

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

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- 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

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.

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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.

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
Metabolic activation: with and without metabolic activation
Result: negative

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 cytogenetic 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.

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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

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.

Paraffin oils (petroleum), catalytic dewaxed light:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : No data is available on the product itself.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: No data available

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

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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

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.

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.

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

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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:

TCSI : On the inventory, or in compliance with the inventory
US.TSCA : All substances listed as active on the TSCA inventory
AICS : On the inventory, or in compliance with the inventory
DSL : All components of this product are on the Canadian DSL
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
NZIoC : Not in compliance with the inventory

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

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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 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 : 07/22/2020

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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