

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

Print Date: 04/02/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO 602 MIL-PRF-87252C
HYDROLYTICALLY STABLE COOLANT & DIELECTRIC LUBRICATING FLUID

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

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@lanxess.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	clear to white
Odour	odourless

GHS Classification

Acute toxicity (Inhalation) : Category 4
Aspiration hazard : Category 1

GHS label elements

Signal word : **Danger**

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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- Hazard pictograms :
- Hazard statements : H304 May be fatal if swallowed and enters airways.
H332 Harmful if inhaled.
- Other hazards : None
- Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
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 (%)
Dec-1-ene, dimers, hydrogenated	68649-11-6	>= 90 - < 100 %
2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol	118-82-1	>= 1 - < 2.5 %

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

Print Date: 04/02/2020

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 : Aspiration may cause pulmonary oedema and pneumonitis.
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Dry sand
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 : In the event of fire, wear self-contained breathing apparatus.

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

Print Date: 04/02/2020

for firefighters

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, Strong oxidizing agents

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 approved filter.

Hand protection

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

Print Date: 04/02/2020

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 : clear to white

Odor : odourless

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 : 158 °C
Method: open cup

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 : 0.8

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

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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Viscosity, kinematic : 5.18 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 : Contamination
Heat, flames and sparks.

Incompatible materials : Strong acids and strong bases
Strong oxidizing agents

Hazardous decomposition products : Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: 2,525 mg/kg
Method: Calculation method

Acute inhalation toxicity : Remarks: No data available

Acute toxicity estimate: 11.11 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 2,500 mg/kg
Method: Calculation method

Components:

Dec-1-ene, dimers, hydrogenated:

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

Acute inhalation toxicity : LC50 (Rat): 3.8 mg/l
Test atmosphere: vapour

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

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

Skin corrosion/irritation

Components:

Dec-1-ene, dimers, hydrogenated:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Components:

Dec-1-ene, dimers, hydrogenated:

Species: Rabbit
Result: No eye irritation

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.

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

Components:

Dec-1-ene, dimers, hydrogenated:

May be harmful if swallowed and enters airways.

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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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:

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : LC50 (Mysid shrimp): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

Partition coefficient: n-octanol/water : log Pow: 6.24 (68 °F / 20 °C)
GLP: yes

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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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.

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

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

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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 : Acute toxicity (any route of exposure)
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.

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	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

SAFETY DATA SHEET



ROYCO 602 MIL-PRF-87252C

Version: 1.8

Revision Date: 07/11/2018

Print Date: 04/02/2020

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.