

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO LANDING GEAR FLUID RED

Product Use Description: Lubricant

Company: Manufacturer
Anderol Specialty Lubricants, a division of Chemtura Corporation
215 Merry Lane
East Hanover, NJ
07936
United States of America

Telephone: +1 203-573-4596, Toll Free: +1 888-263-3765

Email: msdsrequest@chemtura.com
Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

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	red

GHS Classification

Eye irritation : Category 2A
Aspiration hazard : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS Label elementSignal word : **Danger**

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

Hazard pictograms

:



Hazard statements

: H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Other hazards

: None

Precautionary statements

: **Prevention:**
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC

Group 3: Not classifiable as to its carcinogenicity to humans

Distillates (petroleum), 64742-46-7

hydrotreated middle

Distillates (petroleum), 64742-47-8

hydrotreated light

2,6-di-tert-butyl-p-cresol 128-37-0

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

Chemical Name	CAS-No.	Concentration (%)
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 50 - < 70 %
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 10 - < 20 %
Distillates (petroleum), hydrotreated light	64742-47-8	>= 5 - < 10 %
NJTS# 136411-5778P Polyolefins		>= 1 - < 5 %
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	>= 1 - < 5 %
Phenol, isobutylenated, phosphate (3:1)	68937-40-6	>= 0.1 - < 1 %
2,6-di-tert-butyl-p-cresol	128-37-0	>= 0.1 - < 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 discolouration (lips, ear lobes, fingernails), give oxygen as quickly as possible.
Call a physician or poison control centre immediately.
- 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.
Call a physician or poison control centre immediately.
- 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
Foam
Alcohol-resistant foam
Water mist
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during : Burning produces noxious and toxic fumes.

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

firefighting

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 : 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

SAFETY DATA SHEET

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

		TWA (Mist)	5 mg/m3	OSHA P0
Distillates (petroleum), hydrotreated middle	64742-46-7	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA	400 ppm 1,600 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	200 mg/m3	ACGIH
		TWA	400 ppm 1,600 mg/m3	OSHA P0
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
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

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

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: red
pH	: No data available
Melting point/range	: Not applicable
Boiling point/boiling range	: No data available
Flash point	: > 200 °C
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative density	: No data available
<u>Solubility(ies)</u>	
Water solubility	: slightly soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, kinematic	: ca. 14.5 mm ² /s (40 °C)

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	: Contamination Heat, flames and sparks.
Incompatible materials	: Strong acids and strong bases
Hazardous decomposition products	: Carbon oxides

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

2,6-di-tert-butyl-p-cresol
(Component): LD50: > 2,930 mg/kg
Species: Rat
Method: OECD Test Guideline 401

Acute dermal toxicity

2,6-di-tert-butyl-p-cresol
(Component): LD50: > 2,000 mg/kg
Species: Rat
Method: OECD Test Guideline 402

Skin irritation

1-Decene, tetramer, mixed
with 1-decene trimer,
hydrogenated (Component)
Phosphorodithioic acid, O,O-
di-C1-14-alkyl esters, zinc
salts (Component)

: Result: No skin irritation

: Result: Irritating to skin.

2,6-di-tert-butyl-p-cresol
(Component): Species: Rabbit
Result: No skin irritation

Eye irritation

1-Decene, tetramer, mixed
with 1-decene trimer,
hydrogenated (Component)
Phosphorodithioic acid, O,O-
di-C1-14-alkyl esters, zinc
salts (Component)

: Result: No eye irritation

: Species: Rabbit
Result: Risk of serious damage to eyes.
Method: OECD Test Guideline 4052,6-di-tert-butyl-p-cresol
(Component): Species: Rabbit
Result: No eye irritation

Sensitisation

Phosphorodithioic acid, O,O-
di-C1-14-alkyl esters, zinc
salts (Component): Maximisation Test (GPMT)
Species: Guinea pig
Classification: Did not cause sensitisation on laboratory animals.2,6-di-tert-butyl-p-cresol
(Component): Species: Guinea pig
Classification: Did not cause sensitisation on laboratory animals.

CMR effects

1-Decene, tetramer, mixed
with 1-decene trimer,: Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects.

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

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| hydrogenated (Component) | Teratogenicity: No effects on or via lactation, Did not show teratogenic effects in animal experiments.
Reproductive toxicity: No toxicity to reproduction |
| 2,6-di-tert-butyl-p-cresol (Component) | : Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No effects on or via lactation
Reproductive toxicity: No toxicity to reproduction |
| Further information (Product) | : There is no data available for this product. |

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

Toxicity to fish (Chronic toxicity)
 Phenol, isobutylated, phosphate (3:1) (Component) : NOEC: 0.093 mg/l
 Exposure time: 90 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
 Phenol, isobutylated, phosphate (3:1) (Component) : NOEC: 0.0399 mg/l
 Exposure time: 21 d

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 %

Further information on ecology

ROYCO LANDING GEAR FLUID RED

Version: 1.1

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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.

SECTION 14. TRANSPORT INFORMATION**ADR**

Not dangerous goods

RID

Not dangerous goods

MERCOSUR

Not dangerous goods

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

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)
xylene	1330-20-7	100	*

ROYCO LANDING GEAR FLUID RED

Version: 1.1

Revision Date: 12/18/2014

Print Date: 04/14/2015

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
formaldehyde	50-00-0	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
Phosphorodithioic acid, 68649-42-3 1.3487
O,O-di-C1-14-alkyl esters,
zinc salts

US State Regulations

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

formaldehyde 50-00-0

The components of this product are reported in the following inventories:

US.TSCA	On TSCA Inventory
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
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

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



SAFETY DATA SHEET

ROYCO LANDING GEAR FLUID RED

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