

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ROYCO SHOCK STRUT 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

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
: 703-527-3887

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

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

| | |
|--------|-------------------------|
| Form | liquid |
| Colour | red |
| Odour | slight hydrocarbon-like |

GHS Classification

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

GHS Label element

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

Signal word : **Danger**

Hazard pictograms :



Hazard statements : H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.

Other hazards : None

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P281 Use personal protective equipment as required.
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.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
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**

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.

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

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

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 carcinogen or potential carcinogen by OSHA.

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.

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 | >= 30 - < 50 % |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | >= 10 - < 20 % |
| Distillates (petroleum), hydrotreated light | 64742-47-8 | >= 5 - < 10 % |
| NJTS# 136411-5778P Polyolefins | | >= 1 - < 5 % |
| NJTS# 136411-5892P Barium compounds | | >= 1 - < 5 % |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | 68649-42-3 | >= 1 - < 5 % |
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | >= 0.1 - < 1 % |
| methyl oleate | 112-62-9 | >= 0.1 - < 1 % |
| Phenol, isobutylenated, phosphate (3:1) | 68937-40-6 | >= 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.

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

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 : Water

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

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.

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

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 |
| 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 |
| NJTS# 136411-5778P Polyolefins | | 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 |

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

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.
Provide adequate ventilation.
Do not breathe dust or spray mist.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Color : red
Odor : slight hydrocarbon-like
pH : Not applicable
Melting point/range :
Not applicable
Boiling point/boiling range : No data available
Flash point : 118 °C

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative density : 0.9

Solubility(ies)

Water solubility : slightly soluble
Partition coefficient: n-octanol/water : No data available
Auto-ignition temperature : not determined

Viscosity

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

Viscosity, kinematic : 14.5 mm²/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
Sulphur oxides
Metal oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product) : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity (Product) : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Method: Calculation method

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

methyl oleate (Component) : LD50: > 5,000 mg/kg
Species: Rabbit
Remarks: Information given is based on data obtained from similar substances.

Skin irritation
NJTS# 136411-5778P : Result: No skin irritation
Polyolefins (Component)
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (Component) : Result: Irritating to skin.

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

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

methyl oleate (Component) : Species: Rabbit
Result: Skin irritation
Method: Draize Test
Exposure time: 24 h
Remarks: Information given is based on data obtained from similar substances.

Eye irritation
NJTS# 136411-5778P : Result: No eye irritation
Polyolefins (Component)
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (Component) : Species: Rabbit
Result: Risk of serious damage to eyes.
Method: OECD Test Guideline 405

2,6-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.

methyl oleate (Component) : Maximisation Test (GPMT)
Species: Human
Classification: Did not cause sensitisation on laboratory animals.
Remarks: Information given is based on data obtained from similar substances.

Reproductive toxicity
methyl oleate (Component) : Species: Rat
Application Route: Oral

CMR effects
NJTS# 136411-5778P : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Polyolefins (Component) : Mutagenicity: Animal testing did not show any mutagenic effects.
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

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

methyl oleate (Component) : Carcinogenicity: Limited evidence of carcinogenicity in animal studies
Mutagenicity: In vitro tests did not show mutagenic effects

Further information (Product) : No data is available on the product itself.

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
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (Component) : EbC50: 1 - 5 mg/l
Exposure time: 96 h
Species: Selenastrum capricornutum (green algae)
Method: OECD Test Guideline 201

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 (Product) : Result: No data available

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment (Product)

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : The product itself has not been tested.



SAFETY DATA SHEET

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of wastes in an approved waste disposal facility.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
- 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) |
|------------|-----------|-----------------------|--------------------------------|
| xylylene | 1330-20-7 | 100 | * |



SAFETY DATA SHEET

ROYCO SHOCK STRUT FLUID RED

Version: 1.0

Revision Date: 12/05/2014

Print Date: 05/06/2015

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA304 Reportable Quantity

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

SARA 311/312 Hazards : Chronic Health Hazard
Acute Health Hazard

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
formaldehyde 50-00-0 0

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
NJTS# 136411-5892P 2.7724
Barium compounds

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 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.