

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

SECTION 1. IDENTIFICATION

Product name: ROYCO 756 MIL-PRF-5606H

Product Use Description: Lubricant

Company: Supplier
LANXESS Canada Co./Cie
25 ERB STREET
Elmira, Ontario
N3B 2J3 Canada
Telephone: (US) +1 866-430-2775Emergency telephone number: :
CANUTEC: 613-996-6666 (call collect) (CANUTEC)

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**GHS Classification**

Aspiration hazard : Category 1

Acute aquatic toxicity : Category 3

Chronic aquatic toxicity : Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

- 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

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 50 - < 70
Distillates (petroleum), hydrotreated middle	64742-46-7	>= 20 - < 30
Distillates (petroleum), hydrotreated light	64742-47-8	>= 5 - < 10
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	>= 1 - < 5
	Not Assigned	>= 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 discoloration (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
Flush with plenty of water.
If eye irritation persists, consult a specialist.

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

- 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 : Water
- Specific hazards during fire-fighting : Burning produces noxious and toxic fumes.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use a water spray to cool fully closed containers.
- 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.
Clean contaminated surface thoroughly.
Material can create slippery conditions.
- Environmental precautions : Do not contaminate water.
Do not flush into surface water or sanitary sewer system.
Discharge into the environment must be avoided.
- 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.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

ROYCO 756 MIL-PRF-5606H

place.

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	0.2 mg/m3	CA BC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
Distillates (petroleum), hydrotreated middle	64742-46-7	TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	TWA	0.2 mg/m3	CA BC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
Distillates (petroleum), hydrotreated middle	64742-46-7	TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA (Mist)	1 mg/m3	CA BC OEL
Distillates (petroleum), hydrotreated light	64742-47-8	TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA BC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	TWA (Mist)	1 mg/m3	CA BC OEL
		TWA (Mist)	5 mg/m3	CA AB OEL
		STEL (Mist)	10 mg/m3	CA AB OEL
		TWAEV (Mist)	5 mg/m3	CA QC OEL
		STEV (Mist)	10 mg/m3	CA QC OEL
2,6-di-tert-butyl-p-cresol	128-37-0	TWA	10 mg/m3	CA AB OEL
		TWAEV	10 mg/m3	CA QC OEL
		TWAEV (Inhalable)	2 mg/m3	CA ON OEL
		TWA (Vapour and inhalable aerosols)	2 mg/m3	CA BC OEL
triphenyl phosphite	115-86-6	TWA	3 mg/m3	CA AB OEL
		TWA	3 mg/m3	CA BC OEL
		TWAEV	3 mg/m3	CA ON OEL
		TWAEV	3 mg/m3	CA QC OEL

Engineering measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Effective exhaust ventilation system

Personal protective equipment

Respiratory protection : not required under normal use
Breathing apparatus needed only when aerosol or mist is formed.
When using this product at elevated temperatures, wear a respirator with a vapour filter.

Hand protection

Remarks : Neoprene gloves

Eye protection : Safety glasses with side-shields
or
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 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: red
Odour	: aromatic
Odour Threshold	: No data available
pH	: Not applicable
pour point	: < -60 °C
Boiling point/boiling range	: No data available
Flash point	: > 93.3 °C Method: ASTM D 93
Evaporation rate	: No data available
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	: ca. 0.86
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, kinematic	: 13.9 mm ² /s (40 °C)
Self-Accelerating decomposition temperature (SADT)	: Method: No information available.
Oxidizing potential	: No information available.

SECTION 10. STABILITY AND REACTIVITY

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

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. Stable under normal conditions.
Conditions to avoid	: Heat, flames and sparks. Contamination
Incompatible materials	: Strong acids and strong bases Oxidizing agents
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

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:

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:

Result: No skin irritation

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

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Components:

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:

Result: No eye irritation

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

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Components:

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

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

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Rat (male and female)
Cell type: Bone marrow
Result: negative

Germ cell mutagenicity - Assessment : Animal testing did not show any 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
Result: Conflicting results have been seen in different studies.

: Test Type: Unscheduled DNA synthesis (UDS)
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

Components:

**ROYCO 756 MIL-PRF-5606H**

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

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 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.

Reproductive toxicity**Components:****1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:**

Reproductive toxicity - Assessment : No toxicity to reproduction
No effects on or via lactation, Did not show teratogenic effects in animal experiments.

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

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

STOT - repeated exposure**Components:****1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:**

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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.

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

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

Toxicity to fish :
Remarks: No data available

Components:**1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 190 mg/l
Exposure time: 48 h

:

Toxicity to fish : LC50 (Fish): 0.8 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.202 mg/l
Exposure time: 48 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.093 mg/l
Exposure time: 90 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.0399 mg/l
Exposure time: 21 d

Persistence and degradability**Product:**

Biodegradability : Result: No data available

Components:

:

Biodegradability : GLP: yes
Remarks: Readily biodegradable.

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

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated:

Partition coefficient: n-octanol/water : log Pow: > 7

:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 1,850

Partition coefficient: n-octanol/water : log Pow: 4.85 (25 °C)

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

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 230 - 2,500
Exposure time: 56 d
Temperature: 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 mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of waste material in compliance with all federal, state, and local regulations.

Contaminated packaging : Do not burn, or use a cutting torch on, the empty drum.

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

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

TDG

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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
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

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

Canadian lists

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz., Part II, Vol. 122, No. 2): WHMIS Ingredient Disclosure List IDL: No component is listed on the WHMIS ingredients disclosure list.

Canada. Canadian Environmental Protection Act (CEPA). National Pollutant Release Inventory (NPRI) (Can. Gaz. Part I, 135:12, 940):

2,6-di-tert-butyl-p-cresol
formaldehyde
xylene

Canada. CEPA 1999 Significant New Activity (SNAc) List: No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER 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

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-



SAFETY DATA SHEET

ROYCO 756 MIL-PRF-5606H

Version 1.2

Revision Date 08/31/2017

Print Date 11/14/2017

Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

Revision Date : 08/31/2017

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.

CA / EN