

ROYCO 560 PRF-23699F HTS

Version 1.4

Revision Date 06/20/2018

Print Date 08/23/2018

SECTION 1. IDENTIFICATION

Product name: ROYCO 560 PRF-23699F HTS

Product Use Description: Lubricant

Synonyms: Synthetic Lubricant Formulation

Company: Supplier
LANXESS Canada Co./Cie
25 ERB STREET
Elmira, Ontario
N3B 2J3 Canada
Telephone: (US) +1 866-430-2775Manufacturer
LANXESS Canada Co./Cie
565 Coronation Drive
West Hill, Ontario
M1E 2K3
Canada

Telephone: 416-284-1661

Emergency 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@lanxess.comMSDSRequest@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**

Reproductive toxicity : Category 2

Acute aquatic toxicity : Category 3

Chronic aquatic toxicity : Category 3

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GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
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)
tris(methylphenyl) phosphate	1330-78-5	>= 1 - < 5
tris(methylphenyl) phosphate	1330-78-5	>= 1 - < 2.5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	>= 1 - < 2.5

SECTION 4. FIRST AID MEASURES

If inhaled

: If inhaled
Move to fresh air.
If breathing is difficult, give oxygen.
Get medical attention if irritation develops and persists.

In case of skin contact

: In case of skin contact
Wash off with soap and water.
If symptoms persist, call a physician.

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In case of eye contact	: In case of eye contact Flush with plenty of water. 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.
Notes to physician	: For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Carbon dioxide (CO ₂) 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	: 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. Remove all sources of ignition. Clean contaminated surface thoroughly. Material can create slippery conditions.
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

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- 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Contains no substances with occupational exposure limit values.

- Engineering measures** : Use with adequate ventilation.
Local ventilation is needed in the presence of airborne mists.
Ensure that eyewash stations and safety showers are close to the workstation location.

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
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 : amber
- Odour : mild
- Odour Threshold : No data available
- pH : No data available

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Melting point/range	: Not applicable
Boiling point/boiling range	: No data available
Flash point	: > 246 °C Method: ASTM D92
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	: 1.0
Solubility(ies)	
Water solubility	: slightly soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Viscosity	
Viscosity, kinematic	: No data available
Self-Accelerating decomposition temperature (SADT)	: Method: No information available.
Oxidizing potential	: No information 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 Contamination
Incompatible materials	: Strong acids and strong bases
Hazardous decomposition products	: Carbon oxides

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

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

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

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

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

Skin corrosion/irritation**Components:****Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation**Components:****Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation**Components:****Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406

Germ cell mutagenicity**Components:****tris(methylphenyl) phosphate:**

Germ cell mutagenicity - : In vitro tests did not show mutagenic effects
Assessment

tris(methylphenyl) phosphate:

Germ cell mutagenicity - : In vitro tests did not show mutagenic effects

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Assessment**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Germ cell mutagenicity - : Not mutagenic in Ames Test

Assessment**Carcinogenicity****Components:****tris(methylphenyl) phosphate:**

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

tris(methylphenyl) phosphate:

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 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:****tris(methylphenyl) phosphate:**Effects on foetal development : Species: Rat
Application Route: Oral
Developmental Toxicity: NOEL: 20 mg/kgReproductive toxicity - Assessment : Suspected of damaging fertility or the unborn child.
Did not show teratogenic effects in animal experiments.**tris(methylphenyl) phosphate:**Effects on foetal development : Species: Rat
Application Route: Oral
Developmental Toxicity: NOEL: 20 mg/kgReproductive toxicity - Assessment : Suspected of damaging fertility or the unborn child.
Did not show teratogenic effects in animal experiments.**Aspiration toxicity****Product:**

No aspiration toxicity classification

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****tris(methylphenyl) phosphate:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.75 mg/l
Exposure time: 96 h
- LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
- LC50 (Oncorhynchus mykiss (rainbow trout)): 0.6 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.146 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- EC50 (Daphnia magna (Water flea)): 0.27 mg/l
Exposure time: 48 h
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to bacteria : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition

tris(methylphenyl) phosphate:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.75 mg/l
Exposure time: 96 h
- LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
- LC50 (Oncorhynchus mykiss (rainbow trout)): 0.6 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.146 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- EC50 (Daphnia magna (Water flea)): 0.27 mg/l
Exposure time: 48 h
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to bacteria : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition

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- Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 71 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 51 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
- Toxicity to algae : EbC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Persistence and degradability**Components:****Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

- Biodegradability : Result: According to the results of tests of biodegradability this product is not readily biodegradable.
Method: CO2 Evolution Test

Bioaccumulative potential**Product:**

- Bioaccumulation : Remarks: No data available

Components:**tris(methylphenyl) phosphate:**

- Partition coefficient: n-octanol/water : Pow: 5.93

tris(methylphenyl) phosphate:

- Partition coefficient: n-octanol/water : Pow: 5.93

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

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

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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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Harmful to aquatic life with long lasting effects.

Components:**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:**

Additional ecological information : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do not allow material to contaminate ground water system.

Do not flush into surface water or sanitary sewer system.

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**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

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ENCS	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not 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

Canadian lists

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

Canada. Canadian Environmental Protection Act (CEPA). National Pollutant Release Inventory (NPRI) (Can. Gaz. Part I, 135:12, 940): Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

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; 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 Organization 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

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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-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

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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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