

**ROYCO 889**

Version 1.0

Revision Date 02/16/2016

Print Date 02/09/2017

SECTION 1. IDENTIFICATION

Product name: ROYCO 889

Product Use Description: Lubricant

Company: Supplier
Chemtura Canada Co./Cie
25 ERB STREET
Elmira, Ontario
N3B 3A3
Canada

Telephone: (US) +1 866-430-2775

Emergency telephone number:
:
: 703-527-3887
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@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Skin sensitisation : Category 1

Specific target organ toxicity
- repeated exposure (Oral) : Category 2 (Liver, Kidney)

Acute aquatic toxicity : Category 3

Chronic aquatic toxicity : Category 3

GHS Label element

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Hazard pictograms



Signal word

: Warning

Hazard statements

: H317 May cause an allergic skin reaction.
 H373 May cause damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves.
Response:
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P314 Get medical advice/ attention if you feel unwell.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
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)
A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate	125643-61-0	>= 1 - < 5
N-1-naphthylaniline	90-30-2	>= 1 - < 5

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

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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 : No information available.
- Notes to physician : No information available.

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 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.
Forms slippery/greasy layers with water.
- 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).

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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.
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**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Contains no substances with occupational exposure limit values.				
N-1-naphthylaniline	90-30-2	TWA	10 ml/m3	ACGIH

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
- 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	: > 204 °C Method: open cup
Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative density	: 1.05
Density	: No data available
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	
Viscosity, kinematic	: 1250 mm ² /s (0 °C) 131 mm ² /s (40 °C) 25.2 mm ² /s (100 °C)
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
Incompatible materials	: Strong acids and strong bases

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Hazardous decomposition : Carbon oxides
products

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:**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

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

Acute inhalation toxicity : Remarks: This information is not available.

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

N-1-naphthylaniline:

Acute oral toxicity : LD50 (Rat): 1,625 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation**Components:****A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Species: Rabbit

Result: No skin irritation

N-1-naphthylaniline:

Species: Rabbit

Method: Draize Test

Result: No skin irritation

Serious eye damage/eye irritation**Components:****A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Species: Rabbit

Result: No eye irritation

N-1-naphthylaniline:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

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Respiratory or skin sensitisation**Components:****A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

Result: Did not cause sensitisation on laboratory animals.

N-1-naphthylaniline:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Result: May cause sensitisation by skin contact.

Test Type: Patch Test

Species: Human

Assessment: May cause sensitisation by skin contact.

Result: May cause sensitisation by skin contact.

Germ cell mutagenicity**Components:****N-1-naphthylaniline:**

Genotoxicity in vitro

: Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

: Test Type: Chinese Hamster Ovary (CHO)

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo

: Test Type: in vivo assay

Species: Mouse (male)

Result: negative

Germ cell mutagenicity -
Assessment: Animal testing did not show any mutagenic effects., Tests on
bacterial or mammalian cell cultures did not show mutagenic
effects.**Carcinogenicity****Components:****N-1-naphthylaniline:**Carcinogenicity - Assess-
ment

: Animal testing did not show any carcinogenic effects.

STOT - repeated exposure**Components:****N-1-naphthylaniline:**

Exposure routes: Oral

Target Organs: Liver, Kidney

Assessment: May cause damage to organs through prolonged or repeated exposure.

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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:**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Toxicity to fish : (Danio rerio (zebra fish)): > 74 mg/l
Exposure time: 96 h

Toxicity to algae : (Scenedesmus capricornutum (fresh water algae)): > 3 mg/l
Exposure time: 72 h

N-1-naphthylaniline:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.44 mg/l
Exposure time: 96 h
Test Type: semi-static test
Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.68 mg/l
Exposure time: 48 h
Test Type: semi-static test
Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.02 mg/l
Exposure time: 21 d
Analytical monitoring: yes

Toxicity to bacteria : EC50 (Protozoa): 2 mg/l
Exposure time: 48 h

EC50 (Bacteria): > 10,000 mg/l
Exposure time: 3 h

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Persistence and degradability**Product:**

Biodegradability : Result: No data available

Components:**A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate:**

Biodegradability : Result: Not readily biodegradable.

N-1-naphthylaniline:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 100 mg/l
Result: According to the results of tests of biodegradability this product is not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301
GLP: yes

Bioaccumulative potential**Product:**

Bioaccumulation : Remarks: No data available

Components:**N-1-naphthylaniline:**

Bioaccumulation : Species: Cyprinus carpio (Carp)
Bioconcentration factor (BCF): 427 - 2,730
Exposure time: 56 d
Temperature: 25 °C
Concentration: 0.1 mg/l

Partition coefficient: n-octanol/water : log Pow: 4.28

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.

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

1907/2006 (EU) : Not in compliance with the inventory
RCH for UCON 50-HB-400
RCH for IRGANOX L135 / RM8277
RCH for PANA

RCH for IRGAMET 39
RCH for DC 200 FLUID

Switzerland. New notified substances and declared preparations : The formulation contains substances listed on the Swiss Inventory, Not in compliance with the inventory
Oxirane, methyl-, polymer with oxirane, monobutyl ether
A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate
Siloxane, dimethyl (>10% in a non hazardous diluent)
Distillates (petroleum), hydrotreated light water

United States TSCA Inventory : On TSCA Inventory

Canadian Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

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- Australia Inventory of Chemical Substances (AICS) : On the inventory, or in compliance with the inventory
- New Zealand. Inventory of Chemical Substances : On the inventory, or in compliance with the inventory
- Japan. ENCS - Existing and New Chemical Substances Inventory : On the inventory, or in compliance with the inventory
- Japan. ISHL - Inventory of Chemical Substances : Not in compliance with the inventory
A mixture of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate
Distillates (petroleum), hydrotreated light naphthenic
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-
- Korea. Korean Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory
- Philippines Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory
- China. Inventory of Existing Chemical Substances in China (IECSC) : On the inventory, or in compliance with the inventory

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):
aniline

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

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(Q)SAR - (Quantitative) Structure Activity Relationship; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TDG - Transportation of Dangerous Goods; 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; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

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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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