



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : ROYCO 782 MIL-PRF-83282D

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Lubricant

Recommended restrictions on use : For industrial use only.

1.3 Details of the supplier of the safety data sheet

Company: Supplier
Chemtura Manufacturing UK Limited
Tenax Road, Trafford Park
Manchester
United Kingdom
M17 1WT

Customer Service: +44 161 875 3800
Prepared by Product Safety Department
(US) +1 866-430-2775

Further information for the safety data sheet :
msdsrequest@chemtura.com

1.4 Emergency telephone number

Emergency telephone number: +44 (0) 1235 239 670 (NCEC)
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

Chronic aquatic toxicity, Category 3

H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)**

Hazard statements	: H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	: P273	Avoid release to the environment.
	Storage: P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.
Hazard statements	: H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	: Prevention: P273 P501	Avoid release to the environment. Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients**3.2 Mixtures****Hazardous components**

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol	118-82-1 204-279-1	Aquatic Chronic4; H413	>= 1 - < 10
Phenol, isobutylenated, phosphate (3:1)	68937-40-6 273-065-8 01-2119519251-50-0002	Aquatic Acute1; H400 Aquatic Chronic1; H410	>= 0.25 - < 1

For explanation of abbreviations see section 16.



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

SECTION 4: First aid measures

4.1 Description of 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.
Get medical attention.
- 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.
- If swallowed : If swallowed, DO NOT induce vomiting.
Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons
Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Foam
Alcohol-resistant foam
Water mist

- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Burning produces noxious and toxic fumes.



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : In the event of fire, cool tanks with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Clean contaminated surface thoroughly.
Material can create slippery conditions.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Do not allow contact with soil, surface or ground water.

6.3 Methods and material for containment and cleaning up

Methods for 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).

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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.

Hygiene measures : Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

7.3 Specific end use(s)

Specific use(s) : Raw material for industry

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Component	End Use	Exposure routes	Potential health effects	Value:
Phenol, isobutylenated, phosphate (3:1) [Triphenyl phosphate > 25%]	Workers	Skin contact	Long-term systemic effects	10.75 mg/kg
	Workers	Inhalation	Long-term systemic effects	7.58 mg/m3
	General exposures	Skin contact	Long-term systemic effects	5.375 mg/kg
	General exposures	Inhalation	Long-term systemic effects	1.87 mg/m3
	General exposures	Ingestion	Long-term systemic effects	5.375 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Component	Environmental Compartment	Value
Phenol, isobutylenated, phosphate (3:1) [Triphenyl phosphate > 25%]	Fresh water	Value: 0.000798 mg/l
	Marine water	Value: 0.00008 mg/l
	Fresh water sediment	Value: 0.96 mg/kg
	Marine sediment	Value: 0.09 mg/kg
	Soil	Value: 0.252 mg/kg

8.2 Exposure controls**Engineering measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Effective exhaust ventilation system

Personal protective equipmentEye protection : Safety glasses with side-shields
Tightly fitting safety goggles

Hand protection

: Neoprene gloves

Skin and body protection

: impervious clothing



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

Respiratory protection : not required under normal use
Breathing apparatus needed only when aerosol or mist is formed.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system., Do not allow contact with soil, surface or ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : red

Odour : No data available

Odour Threshold : No data available

pH : Not applicable

: No data available

: No data available

Flash point : 232 °C
Method: open cup

Evaporation rate : No data available

Flammability (solid, gas) : 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 : 0.85

Density : No data available

Solubility(ies)



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

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

Thermal decomposition : No data available

Viscosity
Viscosity, kinematic : No data available

9.2 Other information

Self-Accelerating decomposition temperature (SADT) : Method: No information available.

Oxidising potential : No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Hazardous polymerisation does not occur.
Stable under normal conditions.

10.4 Conditions to avoid

Conditions to avoid : Contamination
Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents
Strong acids and strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: Not classified due to lack of data.

Acute inhalation toxicity : Remarks: Not classified due to lack of data.

Components:

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

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

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Product:

Remarks: Not classified due to lack of data.

Serious eye damage/eye irritation

Product:

Remarks: Not classified due to lack of data.

Respiratory or skin sensitisation

Product:

Remarks: Not classified due to lack of data.

Germ cell mutagenicity

Product:

Germ cell mutagenicity
Assessment : Not classified due to lack of data.

Carcinogenicity

Product:

Carcinogenicity
Assessment : Not classified due to lack of data.



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

Reproductive toxicity

Product:

Reproductive toxicity
Assessment : Not classified due to lack of data.

STOT - single exposure

Product:

Assessment: Not classified due to lack of data.

STOT - repeated exposure

Product:

Assessment: Not classified due to lack of data.

Aspiration toxicity

Product:

No aspiration toxicity classification

Further information

Product:

Remarks: No data is available on the product itself.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other
aquatic invertebrates : Remarks: No data available

Components:

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): > 1,000
mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other
aquatic invertebrates : LC50 (Mysid shrimp): > 1,000 mg/l
Exposure time: 96 h
Test Type: static test

Phenol, isobutyleneated, phosphate (3:1):



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

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

12.2 Persistence and degradability

Product:

Biodegradability : Result: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

2,2',6,6'-tetra-tert-butyl-4,4'-methylenediphenol:

Partition coefficient: n-octanol/water : log Pow: 6.24 (20 °C)
GLP: yes

Phenol, isobutylenated, phosphate (3:1):

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

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

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



ROYCO 782 MIL-PRF-83282D

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Revision Date 14.09.2015

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12.6 Other adverse effects

Product:

Additional ecological information : Remarks: There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : 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

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Neither banned nor restricted



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

- Candidate List of Substances of Very High Concern for Authorisation : Neither banned nor restricted
- International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Neither banned nor restricted
- Restrictions on the marketing and use of certain dangerous substances and preparations : Distillates (petroleum), hydrotreated heavy paraffinic

Major Accident Hazard Legislation

Seveso Directive

Directive 96/82/EC does not apply

Water contaminating class (Germany) : WGK 2 water endangering

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

- United States TSCA Inventory : On TSCA Inventory
- Canadian Domestic Substances List (DSL) : All components of this product are on the Canadian DSL.
- 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
- 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

15.2 Chemical Safety Assessment

No information available.



ROYCO 782 MIL-PRF-83282D

Version 1.2

Revision Date 14.09.2015

Print Date 09.09.2016

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H412 Harmful to aquatic life with long lasting effects.

Carechem24 International Worldwide Coverage

Emergency Phone Number

<u>Europe:</u>	All European Countries	+44 (0) 1235 239 670 (NCEC)
<u>Asia Pacific:</u>	East / South East Asia – Regional Number	+65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285
	Vietnam	+65 3158 1255
	India	+65 3158 1198
	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Bangladesh	+65 3158 1200
<u>Middle East / Africa:</u>	Arabic speaking countries	+44 (0) 1235 239 671
	All other countries	+44 (0) 1235 239 670
<u>America</u>	United States / Canada	001866 928 0789
<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
	Mexico	+52 555 004 8763

Further information

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.



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006



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