



SAFETY DATA SHEET

ROYCO 899-23699 (C/I)

Version: 1.0

Revision Date: 12/05/2014

Print Date: 04/22/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ROYCO 899-23699 (C/I)

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	clear
Odour	slight

GHS Classification

Skin sensitisation : Category 1
Reproductive toxicity : Category 2
Chronic aquatic toxicity : Category 2

GHS Label element

Signal word : **Warning**

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Hazard pictograms :



Hazard statements :

H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H411 Toxic 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.
P261 Avoid breathing 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.
P281 Use personal protective equipment as required.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC

Group 3: Not classifiable as to its carcinogenicity to humans
Kieselguhr, soda ash flux- 68855-54-9
calcined

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS



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Hazardous components

Chemical Name	CAS-No.	Concentration (%)
pentaerythritol ester of mixed fatty acids		>= 90 - <= 100 %
tris(methylphenyl) phosphate	1330-78-5	>= 1 - < 5 %
NJTS#: 46728100000-0002 - Proprietary amine		>= 0.1 - < 1 %
Kieselguhr, soda ash flux-calcined	68855-54-9	>= 0.1 - < 1 %
tris(methylphenyl) phosphate	1330-78-5	>= 1 - < 5 %
NJTS#: 46728100000-0002 - Proprietary amine		>= 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.
If symptoms persist, call a physician.
- 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.
Consult a physician if necessary.
- Most important symptoms and effects, both acute and delayed : Sensitisation
- 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



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- 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 : 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.
- Materials to avoid : Strong acids and strong bases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

NJTS#: 46728100000-0002 - Proprietary amine		TWA	10 ml/m3	ACGIH
Kieselguhr, soda ash flux-calcined	68855-54-9	TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Dust)	80 mg/m3 / %SiO ₂	OSHA Z-3
N-1-naphthylaniline	90-30-2	TWA	10 ml/m3	ACGIH



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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 : clear

Odor : slight

pH : Not applicable

pour point : -54 °C

Boiling point/boiling range : 399 °C (39.8 hPa)

Flash point : ≥ 246 °C
Method: No information available.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative density : 0.99 - 1.1 (15.6 °C)

Solubility(ies)

Water solubility : slightly soluble
< 1 g/l

Partition coefficient: n- : No data available



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octanol/water

Auto-ignition temperature : not determined

Viscosity

Viscosity, dynamic : 4.90 - 23.0 mPa.s (40 - 100 °C)
Method: ASTM D 445

Viscosity, kinematic : 4.7 mm²/s (100 °C)

25.5 mm²/s (40 °C)

12,000 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 : Heat.

Incompatible materials : Strong acids and strong bases

Hazardous decomposition products : Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
pentaerythritol ester of
mixed fatty acids : LD50: > 2,000 mg/kg
(Component) Species: Rat

NJTS#: 46728100000-0002 : LD50: 1,625 mg/kg
- Proprietary amine Species: Rat
(Component)

N-1-naphthylaniline : LD50: 1,625 mg/kg
(Component) Species: Rat

Acute dermal toxicity
NJTS#: 46728100000-0002 - : LD50 Dermal: > 5,000 mg/kg
Proprietary amine Species: Rabbit
(Component)



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N-1-naphthylaniline
(Component) : LD50 Dermal: > 5,000 mg/kg
Species: Rabbit

Skin irritation
NJTS#: 46728100000-0002 - : Species: Rabbit
Proprietary amine
(Component) Result: No skin irritation
Method: Draize Test

Kieselguhr, soda ash flux-
calcined (Component) : Result: No skin irritation
N-1-naphthylaniline
(Component) : Species: Rabbit
Result: No skin irritation
Method: Draize Test

Eye irritation
NJTS#: 46728100000-0002 - : Species: Rabbit
Proprietary amine
(Component) Result: No eye irritation
Method: OECD Test Guideline 405

Kieselguhr, soda ash flux-
calcined (Component) : Result: No eye irritation
N-1-naphthylaniline
(Component) : Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Sensitisation
NJTS#: 46728100000-0002 - : Maximisation Test (GPMT)
Proprietary amine
(Component) Species: Guinea pig
Classification: May cause sensitisation by skin contact.
Result: May cause sensitisation by skin contact.

Patch Test
Species: Human
Classification: May cause sensitisation by skin contact.
Result: The product is a skin sensitiser, sub-category 1A.

Kieselguhr, soda ash flux-
calcined (Component) : Species: Human
Classification: Non sensitizing.

N-1-naphthylaniline
(Component) : Maximisation Test (GPMT)
Species: Guinea pig
Classification: May cause sensitisation by skin contact.
Result: May cause sensitisation by skin contact.

Patch Test
Species: Human
Classification: May cause sensitisation by skin contact.
Result: The product is a skin sensitiser, sub-category 1A.

Aspiration toxicity (Product) : No aspiration toxicity classification



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CMR effects

tris(methylphenyl) phosphate (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: In vitro tests did not show mutagenic effects
Teratogenicity: Did not show teratogenic effects in animal experiments.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.

NJTS#: 46728100000-0002 - Proprietary amine (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Kieselguhr, soda ash flux-calcined (Component) : Carcinogenicity: Suspected human carcinogens
tris(methylphenyl) phosphate (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: In vitro tests did not show mutagenic effects
Teratogenicity: Did not show teratogenic effects in animal experiments.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.

N-1-naphthylaniline (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish

pentaerythritol ester of mixed fatty acids (Component) : LC50: 1,800 mg/l

Species: Fish

tris(methylphenyl) phosphate (Component) : LC50: 0.75 mg/l
Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

LC50: > 100 mg/l
Exposure time: 96 h

Species: Pimephales promelas (fathead minnow)

LC50: 0.6 mg/l
Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)



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- NJTS#: 46728100000-0002 - : LC50: 0.44 mg/l
Proprietary amine : Exposure time: 96 h
(Component)
Species: Oncorhynchus mykiss (rainbow trout)
semi-static test Analytical monitoring: yes
- tris(methylphenyl) phosphate : LC50: 0.75 mg/l
(Component) : Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
LC50: > 100 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
LC50: 0.6 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
- N-1-naphthylaniline : LC50: 0.44 mg/l
(Component) : Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
semi-static test Analytical monitoring: yes
- Toxicity to daphnia and other : EC50: > 100 mg/l
aquatic invertebrates : Exposure time: 48 h
(Product) : Species: Daphnia magna (Water flea)
Remarks:
Information given is based on data obtained from similar substances.
- Toxicity to bacteria
tris(methylphenyl) phosphate : EC50: > 100 mg/l
(Component) : Exposure time: 3 h
Species: activated sludge
Respiration inhibition
- NJTS#: 46728100000-0002 - : EC50: 2 mg/l
Proprietary amine : Exposure time: 48 h
(Component) : Species: Protozoa
EC50: > 10,000 mg/l
Exposure time: 3 h
Species: Bacteria
- tris(methylphenyl) phosphate : EC50: > 100 mg/l
(Component) : Exposure time: 3 h
Species: activated sludge
Respiration inhibition



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N-1-naphthylaniline
(Component) : EC50: 2 mg/l
Exposure time: 48 h
Species: Protozoa

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

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

NJTS#: 46728100000-0002 - : NOEC: 0.02 mg/l
Proprietary amine
(Component) Exposure time: 21 d
Species: Daphnia magna (Water flea)
Analytical monitoring: yes

N-1-naphthylaniline
(Component) : NOEC: 0.02 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Analytical monitoring: yes

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) : No information on ecology is available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : In accordance with local and national regulations.

Dispose of as special 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.



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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)
1-naphthylamine	134-32-7	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
aniline	62-53-3	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

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

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.



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SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

aniline	62-53-3
1-naphthylamine	134-32-7
2-naphthylamine	91-59-8

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

US.TSCA	On TSCA Inventory
DSL	This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.
AICS	Not in compliance with the inventory
NZIoC	Not in compliance with the inventory
ENCS	Not in compliance with the inventory
KECI	Not in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	Not 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.