

### ROYCO 899-23699 (C/I)

Version: 1.0	Revision Date: 12/05/2014	Print Date: 04/22/2015
SECTION 1. PRODUCT AND C	OMPANY IDENTIFICATION	
Product name	: ROYCO 899-23699 (C/I)	
Product Use Description:	Lubricant	
Company:	<u>Manufacturer</u> Anderol Specialty Lubricants, a division o 215 Merry Lane East Hanover, NJ 07936 United States of America	of Chemtura Corporation
	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 num Data Sheet.	bers see section 16 of the Safety
Prepared by	Product Safety Department (US) +1 866-430-2775	
	MSDSRequest@chemtura.com	
Recommended use of the c	hemical 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**

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: Warning

ANDEROL SAFETY DATA SHEET			
Specialty Lubricants			
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Hazard pictograms		3	
Hazard statements	: H317 May cause an allergic skin H361 Suspected of damaging fer H411 Toxic to aquatic life with lo	rtility or the unborn child.	
Other hazards	: None		
Precautionary statements	<ul> <li>Prevention: P201 Obtain special instructions P202 Do not handle until all safe and understood. P261 Avoid breathing dust/ fume P272 Contaminated work clothin the workplace. P273 Avoid release to the enviro P280 Wear protective gloves. P281 Use personal protective eq <b>Response:</b> P302 + P352 IF ON SKIN: Wash P308 + P313 IF exposed or cond attention.</li> <li>P333 + P313 If skin irritation or ra advice/ attention.</li> <li>P363 Wash contaminated clothin P391 Collect spillage.</li> <li>Storage: P405 Store locked up.</li> <li>Disposal: P501 Dispose of contents/ conta disposal plant.</li> </ul>	ty precautions have been read / gas/ mist/ vapours/ spray. g should not be allowed out of nment. uipment as required. with plenty of soap and water cerned: Get medical advice/ ash occurs: Get medical ng before reuse.	
Carcinogenicity:			
IARC	Group 3: Not classifiable as to its ca Kieselguhr, soda ash flux- 688 calcined	rcinogenicity to humans 55-54-9	
OSHA	No component of this product present equal to 0.1% is identified as a carci carcinogen by OSHA.		
NTP	No component of this product preser equal to 0.1% is identified as a know 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	<ul> <li>If inhaled Move to fresh air.</li> <li>If not breathing, give artificial respiration.</li> <li>If breathing is difficult, give oxygen.</li> <li>In case of bluish discolouration (lips, ear lobes, fingernails), give oxygen as quickly as possible.</li> <li>If symptoms persist, call a physician.</li> </ul>
In case of skin contact	<ul> <li>In case of skin contact</li> <li>Wash off with soap and water.</li> <li>Remove contaminated clothing and shoes.</li> <li>Wash contaminated clothing before re-use.</li> <li>Get medical attention if irritation develops and persists.</li> </ul>
In case of eye contact	<ul> <li>In case of eye contact</li> <li>Rinse thoroughly with plenty of water, also under the eyelids.</li> <li>If eye irritation persists, consult a specialist.</li> </ul>
If swallowed	: If swallowed, DO NOT induce vomiting. Consult a physician if necessary.
Most important symptoms and effects, both acute and	: Sensitisation
delayed 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 tox	ric fumes.
Specific extinguishing methods	: In the event of fire, cool tanks with	n water spray.
Special protective equipment for firefighters	: In the event of fire, wear self-conta Use personal protective equipmer	• • • •

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation.	
Environmental precautions	<ul> <li>Should not be released into the environment.</li> <li>Do not contaminate water.</li> <li>Do not flush into surface water or sanitary sewer system.</li> </ul>	
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	<ul> <li>Keep container closed when not in use.</li> <li>Do not use pressure to empty drums.</li> <li>Ensure all equipment is electrically grounded before beginning transfer operations.</li> </ul>
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 / %SiO2	OSHA Z-3
N-1-naphthylaniline	90-30-2	TWA	10 ml/m3	ACGIH

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Version: 1.0       Revision Date: 12/05/2014       Print Date: 04/22         Engineering measures       :       Effective exhaust ventilation system Ensure that eyewash stations and safety showers are close 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       :       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.			
Ensure that eyewash stations and safety showers are close the workstation location.Personal protective equipmentRespiratory 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 glovesEye protection: Safety glasses with side-shields Tightly fitting safety gogglesSkin and body protection: impervious clothingHygiene measures: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.	ersion: 1.0	Revision Date: 12/05/2014	Print Date: 04/22/2015
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 	Engineering measures	Ensure that eyewash stations an	
formed.In the case of vapour formation use a respirator with an approved filter.Hand protection Remarks: Neoprene glovesEye protection: Safety glasses with side-shields Tightly fitting safety gogglesSkin and body protection: impervious clothingHygiene measures: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.	Personal protective equip	ment	
Remarks: Neoprene glovesEye protection: Safety glasses with side-shields Tightly fitting safety gogglesSkin and body protection: impervious clothingHygiene measures: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.	Respiratory protection	formed. In the case of vapour formation u	
Tightly fitting safety goggles         Skin and body protection       : impervious clothing         Hygiene measures       : Avoid contact with skin, eyes and clothing. Provide adequate ventilation.		: Neoprene gloves	
Hygiene measures       : Avoid contact with skin, eyes and clothing.         Provide adequate ventilation.	Eye protection		
Provide adequate ventilation.	Skin and body protection	: impervious clothing	
	Hygiene measures	Provide adequate ventilation.	-

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid	
Color	: clear	
Odor	: slight	
рН	: 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

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Acute dermal toxicity NJTS#: 46728100000-0002 - Proprietary amine (Component)	: LD50 Dermal: > 5,000 mg/kg Species: Rabbit	
N-1-naphthylaniline (Component)	: LD50: 1,625 mg/kg Species: Rat	
mixed fatty acids (Component) NJTS#: 46728100000-0002 - Proprietary amine (Component)	Species: Rat : LD50: 1,625 mg/kg Species: Rat	
Acute oral toxicity pentaerythritol ester of	: LD50: > 2,000 mg/kg	



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N-1-naphthylaniline (Component)	: LD50 Dermal: > 5,000 mg/kg Species: Rabbit	
Skin irritation NJTS#: 46728100000-0002 - Proprietary amine (Component)	: Species: Rabbit Result: No skin irritation Method: Draize Test	
Kieselguhr, soda ash flux-	: Result: No skin irritation	
calcined (Component) N-1-naphthylaniline (Component)	: Species: Rabbit Result: No skin irritation Method: Draize Test	
Eye irritation NJTS#: 46728100000-0002 - Proprietary amine (Component)	: Species: Rabbit Result: No eye irritation Method: OECD Test Guideline 40	05
Kieselguhr, soda ash flux-	: Result: No eye irritation	
calcined (Component) N-1-naphthylaniline (Component)	: Species: Rabbit Result: No eye irritation Method: OECD Test Guideline 40	05
Sensitisation NJTS#: 46728100000-0002 - Proprietary amine (Component)	: Maximisation Test (GPMT) Species: Guinea pig Classification: May cause sensitis Result: May cause sensitisation b	
	Patch Test Species: Human Classification: May cause sensitis Result: The product is a skin sens	
Kieselguhr, soda ash flux- calcined (Component)	: Species: Human Classification: Non sensitizing.	
N-1-naphthylaniline (Component)	: Maximisation Test (GPMT) Species: Guinea pig Classification: May cause sensitis Result: May cause sensitisation b	
	Patch Test Species: Human Classification: May cause sensitis Result: The product is a skin sens	
Aspiration toxicity (Product)	: No aspiration toxicity classification	1
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CMR effects tris(methylphenyl) phosphate (Component)	Mutagenicity: In vitro tests did Teratogenicity: Did not show te	did not show any carcinogenic effent not show mutagenic effects aratogenic effects in animal experim and of damaging fertility or the unbor		
NJTS#: 46728100000-0002 - Proprietary amine (Component)	Mutagenicity: Animal testing di	did not show any carcinogenic effed d not show any mutagenic effects., cultures did not show mutagenic effects.		
Kieselguhr, soda ash flux- calcined (Component) tris(methylphenyl) phosphate (Component)	Mutagenicity: In vitro tests did Teratogenicity: Did not show te	did not show any carcinogenic effe		
N-1-naphthylaniline (Component)	Mutagenicity: Animal testing di	did not show any carcinogenic effe d not show any mutagenic effects., cultures did not show mutagenic ef		
Further information (Product)	: The product itself has not been	tested.		

### SECTION 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity effects**

SAP (	5.0 SDS 2012-2 NA GHS		8 / 12	SDS Number: 00000006922
			Species: Oncorhynchus mykiss (rainbow	trout)
			LC50: 0.6 mg/l Exposure time: 96 h	
			Species: Pimephales promelas (fathead n	ninnow)
			LC50: > 100 mg/l Exposure time: 96 h	
			Species: Oncorhynchus mykiss (rainbow	trout)
	tris(methylphenyl) phosphate (Component)	:	LC50: 0.75 mg/l Exposure time: 96 h	
	fatty acids (Component)		Species: Fish	
	Toxicity to fish pentaerythritol ester of mixed fatty eside (Component)	:	LC50: 1,800 mg/l	



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NJTS#: 46728100000-0002 - Proprietary amine	: LC50: 0.44 mg/l Exposure time: 96 h	
(Component)	Species: Oncorhynchus mykiss semi-static test Analytical monito	
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)
N-1-naphthylaniline (Component)	: LC50: 0.44 mg/l Exposure time: 96 h	
	Species: Oncorhynchus mykiss semi-static test Analytical monito	
Toxicity to daphnia and other aquatic invertebrates (Product)	: EC50: > 100 mg/l Exposure time: 48 h Species: Daphnia magna (Water Remarks: Information given is based on da	
Toxicity to bacteria tris(methylphenyl) phosphate (Component)	: EC50: > 100 mg/l Exposure time: 3 h Species: activated sludge Respiration inhibition	
NJTS#: 46728100000-0002 - Proprietary amine (Component)	: EC50: 2 mg/l Exposure time: 48 h Species: Protozoa	
	EC50: > 10,000 mg/l Exposure time: 3 h Species: Bacteria	
tris(methylphenyl) phosphate (Component)	: EC50: > 100 mg/l 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 oth NJTS#: 46728100000-000 Proprietary amine (Component)	ner aquatic invertebrates (Chronic toxicity) 2 - : NOEC: 0.02 mg/l Exposure time: 21 d Species: Daphnia magna (Water fle Analytical monitoring: yes	ea)
N-1-naphthylaniline (Component)	: NOEC: 0.02 mg/l Exposure time: 21 d Species: Daphnia magna (Water fle Analytical monitoring: yes	ea)
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 e	cology	
Ecotoxicology Assessme	ent	
Results of PBT assessmen This mixture contains no s Additional ecological information (Product)	nt (Product) ubstance considered to be persistent, bioac : No information on ecology is availa	
ECTION 13. DISPOSAL CON	ISIDERATIONS	
Disposal methods		
Waste from residues	: In accordance with local and natior	nal regulations.
	Dispose of as special waste in com national regulations. Dispose of wastes in an approved Do not contaminate ponds, waterw chemical or used container. Do not dispose of waste into sewer	waste disposal facility. ays or ditches with

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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	know	n CAS numbers that exce	any chemical components with eed the threshold (De Minimis) SARA Title III, Section 313.			
	US State Regula	tions					
	California Prop 6		NING! This product conta of California to cause cause	ins a chemical known to the			
		Iniline		62-53-3			
	•	-naphthylamine		134-32-7			
		2-naphthylamine		91-59-8			
	The components of this product are reported in the following inventories:						
	US.TSCA		SCA Inventory				
	DSL		adian NDSL. All other com	ving components listed on the ponents are on the Canadian			
	AICS		n compliance with the inve	entory			
	NZIoC		n compliance with the inve				
	ENCS		n compliance with the inve				
	KECI		n compliance with the inve				
	PICCS IECSC		n compliance with the inve n compliance with the inve				
		INOLI		Sillory			

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

#### **Other Emergency Phone Number**

Latin America:	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
Mexico:		+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.