



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYCO 634E
ADVANCED WEAPONS CLEANER, LUBE & PRESERVATIVE

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

Email: msdsrequest@chemtura.com
Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

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

Form	liquid
Colour	dark amber
Odour	characteristic

GHS Classification

Skin irritation : Category 2
Chronic aquatic toxicity : Category 3

ROYCO 634E


Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

GHS Label element

Signal word : **Warning**

Hazard pictograms : 

Hazard statements : H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.

Other hazards : None

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC Group 3: Not classifiable as to its carcinogenicity to humans
Distillates (petroleum), 64742-47-8
hydrotreated light
2-butoxyethanol 111-76-2

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

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
NJTS# 136411-5778P Polyolefins		>= 20 - < 30 %
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	>= 10 - < 20 %



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

Acetic acid, C9-11-branched alkyl esters, C10-rich	108419-34-7	>= 5 - < 10 %
Calcium alkylnaphthalenesulfonate		>= 1 - < 5 %
Distillates (petroleum), hydrotreated light	64742-47-8	>= 1 - < 5 %
2-butoxyethanol	111-76-2	>= 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.
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
Immediately flush eye(s) 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 : irritant effects
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Do not contaminate water.
Do not flush into surface water or sanitary sewer system.
Discharge into the environment must be avoided.
- 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 : Handle in accordance with good industrial hygiene and safety practice.
Keep container closed when not in use.
Keep away from heat and flame.
Ensure all equipment is electrically grounded before beginning transfer operations.
- Conditions for safe storage : Keep away from heat and sources of ignition.
Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.
- Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Inhalable)	5 mg/m3	ACGIH



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

		fraction)		
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
Distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	200 mg/m3	ACGIH
		TWA	400 ppm 1,600 mg/m3	OSHA P0
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		TWA	5 ppm 24 mg/m3	NIOSH REL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Sampling time	Sampling time	Permissible concentration	Basis
-----------	---------	--------------------	---------------	---------------	---------------------------	-------

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 : Breathing apparatus needed only when aerosol or mist is formed.

Hand protection
Remarks : Impervious 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 : dark amber

Odor : characteristic



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

Odour Threshold : No data available

Melting point/range :

Not applicable

Boiling point/boiling range : No data available

Evaporation rate : No data available

Flash point : > 100 °C

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 : No data available

Density : 0.88 g/cm³

Solubility(ies)

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

Viscosity

Viscosity, kinematic : No data 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 : Oxidizing agents

Hazardous decomposition products : Carbon oxides



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute dermal toxicity
Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : LD50: > 3,160 mg/kg
Species: Rabbit

Skin irritation
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated (Component) : Result: No skin irritation
Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : Species: Rabbit
Result: Skin irritation
Method: OECD Test Guideline 404
Exposure time: 4 h

2-butoxyethanol (Component) : Result: Irritating to skin.

Eye irritation
1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated (Component) : Result: No eye irritation
Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
Remarks: Information given is based on data obtained from similar substances.

2-butoxyethanol (Component) : Result: Irritating to eyes.

Sensitisation
Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : Patch Test
Species: Human
Remarks: Patch test on human volunteers did not demonstrate sensitisation properties.
Information given is based on data obtained from similar substances.

Aspiration toxicity (Product) : No aspiration toxicity classification

CMR effects
1-Decene, tetramer, mixed with 1-decene trimer, : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects.



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

- hydrogenated (Component) : Teratogenicity: No effects on or via lactation, Did not show teratogenic effects in animal experiments.
Reproductive toxicity: No toxicity to reproduction
- Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No effects on or via lactation
- Further information (Product) : There is no data available for this product.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : Remarks:
No data available

Toxicity to daphnia and other aquatic invertebrates

1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated (Component) : EC50: 190 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : EC50: 1.8 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Method: OECD Test Guideline 202

Toxicity to algae

Acetic acid, C9-11-branched alkyl esters, C10-rich (Component) : EC50: > 1,021 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Method: OECD Test Guideline 201

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



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

Ecotoxicology Assessment

Results of PBT assessment (Product)

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : There is no data available for this product.

Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of waste material in compliance with all federal, state, and local regulations.

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

Additional advice: Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list

: Not relevant
Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act



SAFETY DATA SHEET



ROYCO 634E

Version: 1.1

Revision Date: 04/23/2015

Print Date: 07/21/2015

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

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

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.

formaldehyde 50-00-0

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

US.TSCA	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL.
AICS	Not in compliance with the inventory
NZIoC	Not in compliance with the inventory
ENCS	On the inventory, or 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.