

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

SECTION 1. IDENTIFICATION

Product name: ROYCO 44

Product Use Description: Lubricant

Synonyms: Synthetic Lubricant Formulation

Company: Manufacturer
Anderol Specialty Lubricants, a division of Lanxess Solutions US Inc.
215 Merry Lane
East Hanover, NJ
07936
United States of America (USA)
Telephone: +1 203-573-4596, Toll Free: +1 888-263-3765

Emergency telephone number: 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@lanxess.com

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
---------------	---------	-----------------------

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

Graphite	7782-42-5	>= 50 - < 70
Petrolatum	8009-03-8	>= 50 - < 70
Quartz (SiO ₂)	14808-60-7	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.
Aspiration may cause pulmonary oedema and pneumonitis.
If breathing is difficult, give oxygen.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with warm water and soap.
If skin irritation persists, call a physician.
Cool skin rapidly with cold water after contact with molten material.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Get medical attention immediately.
- If swallowed : Do NOT induce vomiting.
Obtain medical attention.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : (on small fires)
Carbon dioxide (CO₂)
Dry chemical
Dry sand
Extinguishing media - large fires
Water mist
Foam
- Unsuitable extinguishing media : Water spray jet
- Specific hazards during fire-fighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to health.
- Further information : Cool containers/tanks with water spray.

ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

Special protective equipment for firefighters : Self-contained breathing apparatus with full face-piece operated in positive pressure mode.
Body covering protective clothing, full "turn-out" gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.

Environmental precautions : Should not be released into the environment.
Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Pick up and transfer to properly labelled containers.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Wear suitable protective equipment.
Avoid contact with skin, eyes and clothing.
Keep tightly closed.
Protect from contamination.

Conditions for safe storage : Keep tightly closed in a dry, cool and well-ventilated place.

Technical measures/Precautions : Keep away from oxidizing agents.

Further information on storage stability : Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Graphite	7782-42-5	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Respirable fraction)	2 mg/m ³	ACGIH
		TWA (Respirable)	2.5 mg/m ³	NIOSH REL

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
 Date of first issue: 12/05/2014

		TWA (Dust)	15 Million particles per cubic foot	OSHA Z-3
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	2.5 mg/m ³	OSHA P0
Quartz (SiO ₂)	14808-60-7	TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (Respirable dust)	0.05 mg/m ³	NIOSH REL
		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
Graphite	7782-42-5	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Respirable fraction)	2 mg/m ³	ACGIH
		TWA (Respirable)	2.5 mg/m ³	NIOSH REL
		TWA (Dust)	15 Million particles per cubic foot	OSHA Z-3
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	2.5 mg/m ³	OSHA P0
Petrolatum	8009-03-8	TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH
		TWA (Mist)	5 mg/m ³	OSHA P0
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL
Quartz (SiO ₂)	14808-60-7	TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3

ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

		TWA (Respirable dust)	0.05 mg/m ³	NIOSH REL
		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1

Engineering measures : Use with adequate ventilation.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand protection

Remarks : When handling hot material, use heat resistant gloves.

Eye protection : Safety goggles

Skin and body protection : Impervious clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Use only with adequate ventilation.
Avoid breathing vapours, mist or gas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : paste

Colour : black

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : > 392 °F / 200 °C
Method: open cup

Evaporation rate : No data available

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : Not applicable

Relative vapour density : No data available

Relative density : > 1

Solubility(ies)

 Water solubility : negligible

 Solubility in other solvents : partly soluble

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : not determined

Decomposition temperature : No data available

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

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : No data available

Oxidizing potential : No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Contamination

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : Oxides of calcium
Sulphur oxides
Carbon oxides

ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

SECTION 11. TOXICOLOGICAL INFORMATION**Germ cell mutagenicity****Components:****Quartz (SiO₂):**

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay
Result: negative

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

STOT - repeated exposure**Components:****Quartz (SiO₂):**

Exposure routes : Inhalation
Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity**Product:**

No aspiration toxicity classification

Further information**Product:**

Remarks : No data is available on the product itself.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish : Remarks: No data available

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

Persistence and degradability

Product:

Biodegradability : Result: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

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 : No information on ecology is available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

SECTION 14. TRANSPORT INFORMATION

International Regulations

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

49 CFR

Not regulated as a dangerous good

ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
------------	---------	---------------------

SARA 311/312 Hazards : No SARA Hazards

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.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

California List of Hazardous Substances

Graphite	7782-42-5
Petrolatum	8009-03-8

California Permissible Exposure Limits for Chemical Contaminants

Graphite	7782-42-5
Petrolatum	8009-03-8
Quartz (SiO ₂)	14808-60-7

California Regulated Carcinogens

Quartz (SiO ₂)	14808-60-7
----------------------------	------------

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

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

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

SAFETY DATA SHEET



ROYCO 44

Version 1.8 Revision Date: 07/22/2019 SDS Number: 400000001771 Date of last issue: 07/11/2018
Date of first issue: 12/05/2014

IECSC : On the inventory, or in compliance with the inventory
TCSI : On the inventory, or in compliance with the inventory
US.TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 11 3197 5891
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 55 5004 8763

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA P0 : USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA : 8-hour, time-weighted average
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA : 8-hour time weighted average
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification

SAFETY DATA SHEET



ROYCO 44

Version	Revision Date:	SDS Number:	Date of last issue: 07/11/2018
1.8	07/22/2019	400000001771	Date of first issue: 12/05/2014

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; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 07/22/2019

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.

US / EN