

Oxylube Spray

Inorganic dry film coating of molybdenum disulphide in aerosol form

Product Overview

ROCOL® Oxylube Spray provides a very high content molybdenum disulphide film.

It is designed to lubricate sliding mechanisms such as plain bearings, pins, cams and slides particularly in oxygen or vacuum environments.

ROCOL Oxylube Spray is also suitable for applications where contamination by aggressive chemicals or petroleum based solvents, oils and greases would destroy conventional lubricants.

Typical Applications

ROCOL Oxylube Spray is ideal for use as an assembly and dry film lubricant for sliding mechanisms, plain bearings, valve seats etc.

Features and Benefits

- Temperature range of applied film -200°C to +450°C.
- Dry film lubrication – resists pick up of contaminants.
- Inorganic resin bonded - suitable for oxygen and vacuum environments.
- Prevents galling, pick-up and seizure.
- Resistant to high loads (up to 7,000 kg/cm²).
- Excellent wear resistance (high molybdenum disulphide content).
- Suitable for precision and fine threaded components.

Directions for Storage and Use

- Ensure surfaces to be treated are clean, dry and free from oil, grease or dirt contamination.
- Shake aerosol thoroughly for 2-3 mins after agitator ball begins to rattle.
- Hold upright and apply a thin even coating from approx distance of 10-15 cm (4-6 inches).
- Use only in well ventilated areas.
- After use, invert the can and spray until nozzle is clear.
- Film will be touch dry in 2-3 mins, leave at least 10-15 mins for complete cure @ 20°C.
- The cured film can be improved by lightly burnishing with a lint free cloth.
- The storage temperature should be kept below +50°C, and the storage area should be out of direct sunlight.
- Shelf life is 4 years from date of manufacture.

Specifications

- Rolls Royce Specification – R-R OMAT 4/54
- Naval Cat No.:
 - 0475-224-1963
- NATO Stock No.:
 - 9150-99-224-1963

Pack Sizes

Pack Size	Part Code
400ml	10125

Oxylube Spray

Inorganic dry film coating of molybdenum disulphide in aerosol form

Property	Result
Appearance	Thin dark grey film
Solids	Molybdenum disulphide
Binder	Inorganic resin
Solvent	Hydrocarbon
Propellant	Hydrofluoroalkane
Drying Times:	
Touch dry	2-3 mins
Complete cure (20°C)	Approximately 10-15 mins
Temperature Range of applied film (for best performance apply at ambient temperature)	-200°C to +450°C

Values quoted above are typical and do not constitute a specification.

Safety Data Sheets

Safety data sheets are available for download from our website www.rocol.com or may be obtained from your usual ROCOL contact.

The information in this publication is based on our experience and reports from customers. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.

Issue: 1 Date: 01-11

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ROCOL A division of *ITW* Ltd



BS EN ISO 9001
Certificate No. FM 12448



BS EN ISO 14001
Certificate No. EMS 67596



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Certificate No. OHS 78173



INVESTORS
IN PEOPLE



SAFETY DATA SHEET
OXYLUBE SPRAY

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Compilation date: 06/02/2012

Revision No: 6

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

1.1. Product identifier

Product name: OXYLUBE SPRAY

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

Use of substance / mixture: Dry film lubricant.

1.3. Details of the supplier of the safety data sheet

Company name: ROCOL

ROCOL House

Swillington

Leeds

West Yorkshire

LS26 8BS

ENGLAND

Tel: +44 (0) 113 232 2700

Fax: +44 (0) 113 232 2740

Email: customer-service@rocol.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 113 232 2600

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: -: R10; Xi: R38; N: R51/53; -: R67

Most important adverse effects: Flammable. Irritating to skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Flammable.

Irritant.

Dangerous for the environment.



Risk phrases: R10: Flammable.

R38: Irritating to skin.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

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environment.

R67: Vapours may cause drowsiness and dizziness.

Safety phrases: S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

Precautionary phrases: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

1,1,1,2-TETRAFLUOROETHANE AEROSOL PROPELLANT

EINECS	CAS	CHIP Classification	CLP Classification	Percent
212-377-0	811-97-2	-: Substance with a Community workplace exposure limit.	-	50-70%

ISOPARAFFINIC HYDROCARBON

292-458-5	90622-56-3	F: R11; Xn: R65; Xi: R38; -: R67; N: R51/53	-	30-50%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. May cause dizziness.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness or mental confusion may occur.

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4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Do not use water. Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Mix with sand or vermiculite. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Smoking is forbidden.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep away from direct sunlight.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Section 8: Exposure controls/personal protection

8.1. Control parameters

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Hazardous ingredients:

1,1,1,2-TETRAFLUOROETHANE AEROSOL PROPELLANT

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1000ppm (4200mg/m3)	-	-	-

ISOPARAFFINIC HYDROCARBON

UK	1200 mg/m3	-	-	-
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8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not normally required.

Hand protection: Protective gloves.

Eye protection: Safety glasses with side-shields.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Aerosol

Colour: Black

Odour: Characteristic odour

Evaporation rate: Fast

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Not miscible

Viscosity: Non-viscous

Boiling point/range°C: -26

Melting point/range°C: -100

Flash point°C: >40

Autoflammability°C: >200

Vapour pressure: 4270

Relative density: <1

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Heat.

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10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Irritation	DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. May cause dizziness.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Drowsiness or mental confusion may occur.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: Not applicable.

12.2. Persistence and degradability

Persistence and degradability: Only slightly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Highly volatile. Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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Section 14: Transport information

14.1. UN number

UN number: UN1950

14.2. UN proper shipping name

Shipping name: AEROSOLS, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

Transport class: 2

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

EC Directive 94/1/EC adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of Member States relating to aerosol dispensers.

Compiled in accordance with REACH.

Phrases used in s.2 and 3: None

R10: Flammable.

R11: Highly flammable.

R38: Irritating to skin.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65: Harmful: may cause lung damage if swallowed.

R67: Vapours may cause drowsiness and dizziness.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.