

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 1 of 10

### SECTION 1: Chemical product identification and information about manufacturer

#### 1.1 Product identification

Lubricant Redus Molibdenum  
Synonyms – absent.

#### 1.2 Recommendations and restrictions on the use of chemical products

Antifriction multipurpose waterproof lubricant for lubrication of friction units.

#### 1.3 Information about supplier of Safety Data Sheet for the mixture

Company: LLC "JV YUKOIL"  
Street: Bazova St, 3a  
Locality: Zaporizhzhia, Ukraine  
Phone number: +38 061 222 80 32  
Telefax: +38 061 222 80 32  
The contact person: FEA Department  
E-mail: support@yukoil.com  
Internet: <https://yuko.ua>  
Reference Department: FEA Department

#### 1.4 Emergency telephone

Emergency phone number: +38 061 270 50 81

### SECTION 2: Hazard Identification

#### 2.1 Classification of substances and mixtures

This substance is not classified as hazardous according to Directive (EU) No 1272/2008 as amended.

#### 2.2 Label elements

**(EC) No 1272/2008, 67/548/EEC a6o 1999/45/EC**

The product is not subject to mandatory labelling with EU directives.

#### 2.3 Other risk factors

Allergic reactions may occur.

Product vapors may irritate the respiratory tract, skin and eyes.

Harmful to health if swallowed. Do not allow product that has leaked to soak into the ground.

Avoid uncontrolled release of product into the environment.

### SECTION 3: Composition, information on ingredients

#### 3.2 Mixtures

**(EU) No 1272/2008**

#### Composition of hazardous substances

No European Commission	CAS-number	Percentage (by weight)	Name	Classification
278-012-2	74869-22-0	≤90%	Mineral (base) oil	In clause 8.1
231-536-5	7620-77-1	12 to 17%	Lithium hydroxy-12 stearate	No data available
215-263-9	1317-33-5	2 to 5%	Molibdenum Disulphide	Carc. 1B, Skin Irrit 2, Eye Irrit 2, H315, H319, H332, H335, H350
253-249-4	36878-20-3	0,1% to 0,3%	bis(nonylphenyl)amine	Aquatic chronic 4; H413
270-943-2	68511-50-2	2 to 2,5%	1-Propene, 2-methyl-, sulfurized	Aquatic Chronic 4

#### 67/548/EEC or 1999/45/EC

#### Unsafe composition of substances

No European commission	CAS-number	Percentage (by weight)	Name	Classification 67/548/EEC
278-012-2	74869-22-0	≤90%	Mineral (base) oil	In clause 8.1
231-536-5	7620-77-1	12 to 17%	Lithium hydroxy-12 stearate	Xi R36/37

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 2 of 10

215-263-9	1317-33-5	2 to 5%	Molibdenum Disulphide	N R50
253-249-4	36878-20-3	0,1% to 0,3%	bis(nonylphenyl)amine	H413 R53
270-943-2	68511-50-2	2 to 2,5%	1-Propene, 2-methyl-, sulfurized	N Xi R53

Contains ingredients that are not subject to declaration according to current safety and regulatory criteria. For the explanatory text of R-phrases, see section 16.

### Further instructions

DMSO – Extract <3%, IP 346.

PCB concentration <1 mg/kg.

Classification system: the classification is in accordance with the current EU lists, however, supplemented by data from special literature and company data.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### When inhaling

In case of loss of consciousness, place the victim in a comfortable position and seek medical care. If symptoms persist, consult a doctor.

#### If on skin

Wash affected area with plenty of water and neutral soap. Seek medical care if skin irritation occurs. Contaminated clothing should be washed before reuse.

#### In contact with eyes

In case of contact with eyes, rinse immediately with plenty of running water for at least 5 minutes. Then consult a doctor.

#### When ingested

Do not induce vomiting. Seek medical care immediately.

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

See section 11

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

Information for the doctor: symptomatic treatment

## SECTION 5: Measures and means of ensuring fire and explosion safety

### 5.1 Firefighting equipment

To extinguish fires use water spray, foam, powder, extinguishing agents or carbon dioxide (CO<sub>2</sub>).

#### Firefighting equipment which must not be used for safety reasons

Powerful flow of water

### 5.2 Hazards associated with the substance or mixture

In case of fire, carbon monoxide, carbon dioxide (CO<sub>2</sub>), sulphur oxides, phosphorus oxides, nitrogen oxides may occur.

### 5.3 Firefighting instructions

#### Special protective equipment for firefighting

In case of fire, self-contained breathing apparatus is recommended.

#### Additional instructions

Standard procedures for the elimination of chemical fires

Use fire-fighting measures that comply with local laws and protocols for emergency localization and elimination.

## SECTION 6: Measures for the prevention and elimination of emergency situations

### 6.1 Personal safety measures, protective equipment and emergency procedures

Use a set of personal protective equipment.

Avoid contact with skin, eyes and clothing.

Personal insecurity - slipping on a spilled product.

Localize sources of ignition.

When vapors, dust and aerosols are released, use respiratory equipment.

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 3 of 10

### **6.2 Environmental measures**

Prevent entry into sewage and water bodies. If released into the atmosphere or if the product enters waterways, soil or sewers, notify the local authorities. Prevent surface spread (e.g. localize or protect against spillage).

### **6.3 Methods and materials for localization and purification**

Collect loose liquid for recycling and / or disposal. Residues of the product can be collected with an inert material (sand, diatomaceous earth, universal sorbing agents, sawdust, cloth). Deal with contaminated material in accordance with section 13.

### **6.4 References to other sections**

See sections 7, 8 and 13 for more information.

## **SECTION 7: Rules of conduct and storage**

### **7.1 Protective measures to ensure safety when working with the substance**

#### **Guidelines for safe behavior**

Provide ventilation at the workplace (there must be exhaust ventilation in the room).  
Avoid contact with skin, eyes and clothing, inhalation of product vapors.

#### **Hygiene measures**

Be sure to wash your hands before breaks and after work.

Use a protective skin cream.

If the product gets on your clothes, wash it off immediately and clean it thoroughly before reuse.

#### **Instructions on fire and explosion protection**

Take precautions against static electricity build-up (grounding during pumping / overflowing operations). Avoid the formation of oil mist.

Keep away from open sources of ignition, refrain from smoking when handling the product.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Requirements for warehouses and containers**

Keep product packaging dry and sealed to prevent contamination, moisture and direct sunlight.

#### **Storage conditions**

Store separately from food, drink and animal feed. Do not store together with strong oxidants.

#### **Further information about warehouse storage**

Recommended storage temperature:  $20 \pm 10$  ° C.

Protect from heat, UV radiation, direct sunlight.

## **SECTION 8: Measures for the influence control and personnel protection**

### **8.1 Control parameters**

The product does not contain significant quantities of substances with concentration limit values that need to be monitored at the workplace. During the manufacture, they are guided by applicable laws and regulations.

#### **Other substances with TLV**

Contains mineral oil. Oil mist may form.

Recommended value limits for oil mist:

TWA: 5 mg/m<sup>3</sup>

STEL: 10 mg/m<sup>3</sup>

### **8.2 Control of harmful influences**

Provide adequate ventilation and local exhaust ventilation in critical areas.

#### **Personal protective measures**

After handling products before eating, smoking, using the toilet and at the end of work wash hands and face. Take off dirty clothes. Contaminated clothing should be washed before reuse. Do not eat, drink or smoke in the workplace.

#### **Eye protection**

Tightly sealed safety goggles. DIN - ZEN - standards: EN 166

#### **Respiratory protection**

Not required

If exhaust ventilation is not possible or insufficient, breathing apparatus should be worn.

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 4 of 10

### Hand protection

Oil resistant protective gloves

Tested protective gloves must be worn: DIN - ZEN - standards: EN 374.

Suitable material: NBR (nitrile rubber). The time of loss of mechanical integrity and the swelling characteristics of the material must be taken into account. Preventive skin protection with a protective cream.

### Body protection

Wear suitable protective clothing when working.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

State of aggregation	salve (under normal conditions)
Colour	dark gray to black
Scent	specific, not annoying
Melting point	more than 180°C
Water solubility	insoluble
Flash point	more than 180°C

*The above data are typical and not a specification.*

## SECTION 10: Stability and chemical activity

### 10.1 Reactivity

Read carefully all the information provided in sections 10.2 - 10.6.

### 10.2 Stability

The material is generally stable at room temperature and pressure. See section 7 for details.

### 10.3 Possibility of hazardous reactions

Absent

### 10.4 Conditions to avoid

See section 7, no further action is required. To avoid thermal decomposition - do not overheat.

### 10.5 Incompatible materials

Oxidants, compressed oxygen

### 10.6 Hazardous decomposition materials

The product is stable under normal conditions of storage and use.

### Thermal decomposition

Smoke, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), aldehydes and other products of incomplete combustion. Sulfur oxides, phosphorus oxides, hydrogen sulfide, alkyl mercaptans and sulfides can be released.

## SECTION 11: Toxicological information

### 11.1 Information about toxicological effects

#### Acute toxicity

##### Oral

The half-lethal dose of LD<sub>50</sub> for white rats is more than 5000 mg / kg. Results are based on data from components or similar products.

##### Dermal

Half-lethal dose LD<sub>50</sub> for rabbits is more than 2000 mg / kg. Results are based on data from components or similar products.

##### Inhalation

There is no evidence that the product or its components may present a toxicological hazard by inhalation.

##### Skin damage/irritation

May cause mild skin irritation. Results are based on data from components or similar products. Prolonged or repeated skin contact with clothing soaked in the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

##### Serious eye injury / damage

No eye irritation expected. Results are based on data from components or similar products.

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 5 of 10

### Respiratory tract irritation

If the material smokes or emits vapors when heated, their exposure may cause some irritation of the mucous membranes and upper respiratory tract. Results are based on data from components or similar products.

### Respiratory tract and skin sensitization

#### Skin

There is no evidence that the product or its components cause skin sensitization.

#### Breathing

There is no data to indicate that the product or its components may be respiratory sensitizers.

### Germ cell mutagenesis

There are no data on mutagenesis or genotoxicity of the product or its components present in concentrations above 0.1%.

### Carcinogenicity

This product is believed to contain highly refined petroleum products and is not a carcinogen according to IARC. All oils contained in this product contain less than 3% extracted substances in accordance with the IP 346 test.

### Mineral (base) oil CAS # 74869-22-0

#### Acute toxicity

##### Orally

The semi-lethal dose of LD<sub>50</sub> for white rats is more than 5000 mg / kg. The results are based on data for components or similar products

##### Dermal

The semi-lethal dose of LD<sub>50</sub> for rabbits is more than 2000 mg / kg. The results are based on data for components or similar products

#### Inhalation

There is no evidence that the product or its components may present a toxicological hazard if inhaled

### Irritation

#### Skin

May cause mild skin irritation. The results are based on data for components or similar products. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

#### Eyes

No eye irritation is expected. The results are based on data for components or similar products

### Respiratory tract

If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

### Sensitization

#### Skin

There is no evidence that the product or its components cause skin sensitization

### Respiratory tract

There is no evidence that the product or its components may be airway sensitizers.

#### Eyes

There is no evidence that the product or its components cause eye sensitization

### Chronic toxicity

There are no data on the risk of chronic exposure to the product or its components present in concentrations above 1%

### Carcinogenicity

It is believed that this product contains highly purified petroleum products and is not a carcinogen, according to IARC. All oils contained in this product contain less than 3% of extractable substances according to test IP 346

### Mutagenicity

There are no data on the mutagenicity or genotoxicity of the product or its components

### Reproductive toxicity

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 6 of 10

There is no evidence that the product or its components affect reproductive function

### Other information

Other health threats are unknown

### Molybdenum Disulphide CAS # 1317-33-5

#### Acute toxicity

##### Orally

The semi-lethal dose of LD<sub>50</sub> for white rats is more than 5000 mg / kg. The results are based on data for components or similar products

##### Dermal

The semi-lethal dose of LD<sub>50</sub> for rabbits is more than 2000 mg / kg. The results are based on data for components or similar products

#### Inhalation

There is no evidence that the product or its components may present a toxicological hazard if inhaled

#### Irritation

##### Skin

May cause mild skin irritation. The results are based on data for components or similar products. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness and cracking of the skin.

##### Eyes

May cause slight eye irritation. The results are based on data for components or similar products

#### Respiratory tract

If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

#### Sensitization

##### Skin

There is no evidence that the product or its components cause skin sensitization

#### Respiratory tract

There is no evidence that the product or its components may be airway sensitizers.

##### Eyes

There is no evidence that the product or its components cause eye sensitization

#### Chronic toxicity

There are no data on the risk of chronic exposure to the product or its components present in concentrations above 1%

#### Carcinogenicity

May cause airborne cancer

#### Mutagenicity

There are no data on the mutagenicity or genotoxicity of the product or its components

#### Reproductive toxicity

There is no evidence that the product or its components affect reproductive function

### Other information

Other health threats are unknown

### Lithium hydroxy-12 stearate CAS # 7620-77-1

#### Acute toxicity

##### Orally

The semi-lethal dose of LD<sub>50</sub> for white rats is more than 5000 mg / kg. The results are based on data for components or similar products

##### Dermal

The semi-lethal dose of LD<sub>50</sub> for rabbits is more than 2000 mg / kg. The results are based on data for components or similar products

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 7 of 10

### Inhalation

There is no evidence that the product or its components may present a toxicological hazard if inhaled

### Irritation

#### Skin

May cause mild skin irritation. The results are based on data for components or similar products. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness and cracking of the skin.

#### Eyes

No eye irritation is expected. The results are based on data for components or similar products

### Respiratory tract

If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

### Sensitization

#### Skin

There is no evidence that the product or its components cause skin sensitization

### Respiratory tract

There is no evidence that the product or its components may be airway sensitizers.

#### Eyes

There is no evidence that the product or its components cause eye sensitization

### Chronic toxicity

There are no data on the risk of chronic exposure to the product or its components present in concentrations above 1%

### Carcinogenicity

It is believed that this is not a carcinogen, according to IARC

### Mutagenicity

There are no data on the mutagenicity or genotoxicity of the product or its components

### Reproductive toxicity

There is no evidence that the product or its components affect reproductive function

### Other information

Other health threats are unknown

### Bis (nonylphenyl) amine) CAS # 36878-20-3

#### Acute toxicity

##### Orally

Semi-lethal dose LD<sub>50</sub> 2600 mg / kg for male / female rats

##### Dermal

The semi-lethal dose of LD<sub>50</sub> for rats is more than 2000 mg / kg

### Inhalation

The semi-lethal concentration of LC<sub>50</sub> is more than 2 mg / l when exposed to rats for 1 hour

### Irritation

#### Skin

Causes skin irritation. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness and cracking of the skin.

#### Eyes

Eye irritation is possible. The results are based on data for components or similar products

### Respiratory tract

If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 8 of 10

### Sensitization

#### Skin

There is no evidence that the product or its components cause skin sensitization

#### Respiratory tract

There is no evidence that the product or its components may be airway sensitizers.

#### Eyes

There is no evidence that the product or its components cause eye sensitization

### Chronic toxicity

No data available

### 1-Propene, 2-methyl-, sulfurized CAS # 68511-50-2

#### Acute toxicity

##### Orally

The semi-lethal dose of LD<sub>50</sub> is more than 5000 mg / kg for rats

##### Dermal

The semi-lethal dose of LD<sub>50</sub> for rats is more than 2000 mg / kg

##### Inhalation

LC<sub>50</sub>, more than 0.39 mg / l when exposed to the whole body for 4 hours

### Irritation

#### Skin

May cause mild skin irritation. Prolonged or repeated contact of clothing impregnated with the material may cause dermatitis. Symptoms may include redness, rash, swelling, dryness, and cracking of the skin.

#### Eyes

Eye irritation is possible. The results are based on data for components or similar products

#### Respiratory tract

If the material smokes or emits vapors when heated, their effects may cause some irritation of the mucous membranes and upper respiratory tract. The results are based on data for components or similar products

### Sensitization

#### Skin

There is no evidence that the product or its components cause skin sensitization

#### Respiratory tract

There is no evidence that the product or its components may be airway sensitizers.

#### Eyes

There is no evidence that the product or its components cause eye sensitization

### Chronic toxicity

NOEL was defined as 50 mg / kg / day for a 13-week dermal trial in rats

### Carcinogenicity

No data available

### Mutagenicity

No data available

### Reproductive toxicity

No data available

### Other information

Other health threats are unknown

## SECTION 12: Environmental Safety

### 12.1 Toxicity

#### Freashwater fish



# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 9 of 10

The acute semi-lethal concentration of LC<sub>50</sub> exceeds 1000 mg / L. Results are based on data from components or similar products.

### Freshwater spineless

The acute semi-lethal EC<sub>50</sub> concentration is 100 - 1000 mg / l. Chronic effect at a concentration of 1 - 10 mg / l. Results are based on data from components or similar products.

### Seaweed

The acute semi-lethal EC<sub>50</sub> concentration is 10 - 100 mg / l. Results are based on data from components or similar products.

### Sea fish

No determination was made.

### Marine spineless

No determination was made.

### Bacteria

No determination was made.

### 12.2 Persistence and tendency to degradation

Difficult to biodegrade. Results are based on data from components or similar products.

### 12.3 Bioaccumulation potential

Unspecified

### 12.4 Mobility in soil

Due to its reduced water solubility, the product is mainly separated mechanically in biological treatment plants. Results are based on data from components or similar products.

### 12.5 Result of PBT and vPvB assessment

Absent

### 12.6 Other side effects

Unknown

## SECTION 13: Disposal recommendations

### 13.1 Waste treatment methods

#### Recommendation

Cannot be disposed of with household waste. Do not allow to enter sewers and waterways.

### Waste (unused products)

Waste oils and waste liquid fuels; Waste from the engine, gearbox, mineral based lubricants from the engine, gearbox, grease are hazardous waste.

### Disposal of uncleaned packaging and recommended cleaning products

Packaging that cannot be cleaned must be recycled. Dispose of in accordance with official regulations.

## SECTION 14: Transport safety requirements

### 14.1 UN Number

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

### 14.2 UN exact shipping name

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

### 14.3 Hazard classes of goods being transported

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

### 14.4 Packaging

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

# Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) No.453/2010

## Lubricant Redus Molibdenum

Printed: 10.03.2021  
version 1.0

Internal Product Code: 15149

page 10 of 10

### **14.5 Harmful impact on the environment**

**ADR/RID** not regulated

**ICAO** not regulated

**IMDG** not regulated

### **14.6 Special precautions for users**

Check eligibility before transporting material at elevated temperatures.

### **14.7 Transportation in bulk is carried out in accordance with Appendix II of the International Convention for the Prevention of Water Pollution 73/78 and IBC standards**

Unspecified

## **SECTION 15: Regulatory information**

### **15.1 Regulatory provisions concerning the safety, health and environment of the middle / legislation**

#### **Global Chemical Inventories**

<b>Australia</b>	All components are in accordance with the Australian Chemical Designation Requirements.
<b>Canada</b>	All components are in accordance with the Canadian Environmental Protection Act and are on the List of Substances Permitted for Import.
<b>China</b>	All components of this product are listed on the China Existing Chemicals List.
<b>EU</b>	For more information on the compliance of this product with the REACH directive, please send your request to the address provided in section 1.
<b>Japan</b>	All components are in compliance with Japan Chemicals Control Law.
<b>Korea</b>	All components are in accordance with Korean regulations.
<b>New Zealand</b>	All components meet New Zealand chemical requirements.
<b>The Philippines</b>	All components are in compliance with the Philippine Toxic and Hazardous Substances and Nuclear Waste Control Act 1969 (R.A. 6969).
<b>Switzerland</b>	All components are in accordance with the Swiss List of Substances Hazardous to the Environment.
<b>The USA</b>	All components of this material are TSCA compliant or uncontrolled.

#### **Water safety classes in Germany**

Water pollution class WGK = 2 in accordance with the Aquatic Hazard Directive, VwVwS, dated 17 May 1999.

### **15.2 Chemical restrictions**

Chemical safety assessment has not been carried out.

## **SECTION 16: Other information**

#### **Created**

Chief Technologist Department of LLC JV YUKOIL

#### **Date of creation**

05/03/2021

#### **Risk phrases (R Phrases)**

R22 - Harmful if swallowed

R36 / 37 - Irritating to eyes and respiratory system

R43 - May cause sensitization by skin contact

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

#### **Important risk statements**

H302 - Harmful if swallowed

H411 - Toxic to aquatic life with long lasting effects

H413 - may be harmful in contact with skin

#### **Additional information**

*The above data applies only to the specified product, but they become invalid if the product is used in conjunction with other materials or processed. The data correspond to our current state of knowledge and experience, but they do not constitute a guarantee of the product quality, but only serve to describe the product and do not form the basis of the contractual relationship. Applicable laws and regulations must be respected by the recipient of our products at their own risk. (Data for Hazardous Ingredients was taken from the latest version of the supplier's safety data sheets.)*