

# Safety Data Sheet

according to the Globally Harmonised System

SDS # : D-0453

## Molybdenum Disulfide Grease

Issuing Date 1987-04-23

Revision Date 2021-04-02

Version 2  
**Active**

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

**Product Name** Molybdenum Disulfide Grease for Xerox Products  
**Part no.** 070P00087

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

**Recommended Use** Lubricant

#### 1.3 Details of the supplier of the safety data sheet

**Supplier** Xerox Ltd.  
 Building 4  
 Uxbridge Business Park  
 Sanderson Road  
 Uxbridge  
 Middlesex. UB8 1DH  
 UK

#### For further information, please contact

**Contact person** Manager, Environment, Health, Safety  
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**For the most current document** <https://safetysheets.business.xerox.com>

#### 1.4 Emergency telephone

To be determined

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

The product is classified and labelled in accordance with Regulation (EC) No. 1272/2008

Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin Sensitisation	Category 1
Acute Aquatic Toxicity	Category 3
Chronic Aquatic Toxicity	Category 3

#### 2.2 Label elements

**Symbol(s)**

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**Signal Word**

Warning

**Hazard Statements**

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H402 - Harmful to aquatic life  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements**

P103 - Read label before use  
 P264 - Wash hands thoroughly after handling  
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P337 + P313 - If eye irritation persists: Get medical advice/attention  
 P362 - Take off contaminated clothing and wash before reuse  
 P501 - Dispose of contents/container to an approved waste disposal plant

**2.3 Other hazards**

No hazard expected under normal conditions of use

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixtures**

Chemical Name	Weight %	CAS No.	EC-No	Classification (Reg. 1272/2008)	Hazard Statements
Molybdenum(IV) sulfide	60-70	1317-33-5	215-263-9	Eye Irrit 2 Skin Irrit 2	H315 H319
Polypropylene glycol monobutyl ether	25-35	9003-13-8	500-003-1	Eye Irrit 2 Skin Irrit 2	H315 H319
Naphthalenesulfonic acid, dinonyl-, calcium salt	<1	57855-77-3	260-991-2	Skin Irrit. 2 Eye Irrit. 2	H319 H315
1-Naphthalenamine, N-phenyl-	<1	90-30-2	201-983-0	Acute Oral 4 Skin Sens 1 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H317 H373 H400 H410
2-Mercaptobenzothiazole	<1	149-30-4	205-736-8	Acute Oral 4 Skin Sens 1 Aquatic Acute 1 Aquatic Chronic 1	H302 H317 H400 H410

Full text of H- statements: see section 16

**Note**

"--" indicates no classification or hazard statements apply.

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## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>General advice</b>	When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes, If irritation persists, call a physician
<b>Skin contact</b>	Wash off immediately with soap and plenty of water, Get medical attention if irritation develops and persists, Wash contaminated clothing before reuse
<b>Inhalation</b>	Not an expected route of exposure, Move to fresh air, If symptoms persist, call a doctor
<b>Ingestion</b>	Never give anything by mouth to an unconscious person, Clean mouth with water, Get medical attention if symptoms occur

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

<b>Acute toxicity</b>	
<b>Eyes</b>	Irritating to eyes
<b>Skin</b>	May cause sensitisation by skin contact, Irritating to skin
<b>Inhalation</b>	No known effect
<b>Ingestion</b>	No known effect
<b>Chronic effects</b>	
<b>Chronic toxicity</b>	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation of susceptible persons

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

<b>Protection of first-aiders</b>	No special protective equipment required
<b>Notes to physician</b>	Treat symptomatically

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Water spray, Carbon dioxide (CO <sub>2</sub> ), Dry chemical, Alcohol-resistant foam, Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire

### 5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours

**Hazardous combustion products**  
Carbon oxides Sulphur oxides Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.

### Other information

<b>Flash point</b>	210 °C	/	410 °F
<b>Method</b>	Closed cup		

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin and the eyes, For personal protection see section 8

### 6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas, Prevent product from entering drains, Material can create slippery conditions

### 6.3 Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so
<b>Methods for cleaning up</b>	Prevent further leakage or spillage if safe to do so, Wipe up with absorbent material (e.g. cloth, fleece)

### 6.4 Reference to other sections

Material can create slippery conditions.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice

**Hygiene measures** Avoid contact with skin, eyes and clothing Wash thoroughly after handling

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

Keep container tightly closed in a dry and well-ventilated place, Keep away from heat, Incompatible with oxidising agents

### 7.3 Specific end uses

Lubricant

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Xerox Exposure Limit** Not established  
**Exposure Limits** For country specific exposure limits see Section 16

Chemical Name	ACGIH TLV	European Union
Molybdenum(IV) sulfide	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	

### 8.2 Exposure controls

**Engineering measures** None under normal use conditions

### Individual protection measures, such as personal protective equipment (PPE)

**Eye/face protection** None under normal use conditions

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<b>Hand protection</b>	Nitrile rubber.
<b>Skin and body protection</b>	Wear suitable protective clothing
<b>Respiratory protection</b>	None under normal use conditions.

**Environmental Exposure Controls**

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	Paste	<b>Odour</b>	Mild
<b>Physical state</b>	Solid	<b>Odour threshold</b>	No data available
<b>Colour</b>	Blue-gray, Black	<b>pH</b>	No data available
<b>Flash point</b>	210 °C / 410 °F	<b>Method</b>	Closed cup
<b>Melting / Freezing Point</b>	Not applicable		
<b>Boiling point/boiling range</b>	No data available		
<b>Softening point</b>	No data available		
<b>Evaporation rate</b>	No data available		
<b>Flammability</b>	Not flammable		
<b>Flammability Limits in Air</b>	No data available		
<b>Explosive Limits</b>	No data available		
<b>Vapour pressure</b>	No data available		
<b>Vapour density</b>	No data available		
<b>Specific gravity</b>	No data available		
<b>Density</b>	2.10 g/ml @20°C		
<b>Water solubility</b>	Insoluble		
<b>Partition coefficient</b>	No data available		
<b>Autoignition temperature</b>	No data available		
<b>Decomposition temperature</b>	No data available		
<b>Viscosity</b>	No data available		
<b>Oxidising properties</b>	Not applicable		

**9.2 Other information**

None

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use

**10.2 Chemical stability**

Stable under normal conditions

**10.3 Possibility of hazardous reactions**

<b>Hazardous reactions</b>	None under normal processing
<b>Hazardous polymerisation</b>	Hazardous polymerisation does not occur

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## 10.4 Conditions to avoid

Excessive heat

## 10.5 Incompatible Materials

Strong oxidising agents

## 10.6 Hazardous decomposition products

Carbon oxides, Sulphur oxides, Nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product Information No product level data available.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Molybdenum(IV) sulfide			2820 mg/m <sup>3</sup> ( Rat ) 4 h
Polypropylene glycol monobutyl ether	5840 mg/kg ( Rat ) 9100 mg/kg ( Rat )	13340 mg/kg ( Rabbit ) 21200 µL/kg ( Rabbit )	
Naphthalenesulfonic acid, dinonyl-, calcium salt	5000 mg/kg ( Rat )	20000 mg/kg ( Rabbit )	18 mg/L ( Rat ) 1 h
1-Naphthalenamine, N-phenyl-	1625 mg/kg ( Rat )	8000 mg/kg ( Rabbit )	
2-Mercaptobenzothiazole	1490 mg/kg ( Rat )	7940 mg/kg ( Rabbit )	>1270 mg/L ( Rat ) 7 h

#### Chronic toxicity

##### Carcinogenicity

This product contains a component that has shown limited evidence of carcinogenicity in some animal studies. One or more authorities have listed it as potentially carcinogenic to humans.

Chemical Name	IARC
2-Mercaptobenzothiazole	2A

#### Other toxic effects

**Sensitisation** May cause an allergic skin reaction  
**Reproductive toxicity** Not determined  
**Target organ effects** No information available  
**Other adverse effects** No information available  
**Aspiration Hazard** Not applicable

#### Information on other hazards

**Endocrine disrupting properties** No information available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

On available data, the mixture / preparation is not harmful to aquatic life

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**Acute Aquatic Toxicity** Harmful  
**Chronic Aquatic Toxicity** Harmful

### 12.2 Persistence and degradability

No product level data available

### 12.3 Bioaccumulative potential

No product level data available

### 12.4 Mobility in soil

Insoluble in water

### 12.5 Results of PBT and vPvB assessment

Not a PBT according to REACH Annex XIII

### 12.6 Endocrine disrupting properties

No information available

### 12.7 Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Waste Disposal Method** This material and its container must be disposed of as hazardous waste

**EWC Waste Disposal No.** 08 04 09\*

## 14. TRANSPORT INFORMATION

### 14.1 UN/ID No

Not regulated

### 14.2 Proper shipping name

Not regulated

### 14.3 Transport hazard class(es)

Not classified

### 14.4 Packing Group

Not applicable

### 14.5 Environmental hazards

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Presents little or no hazard to the environment

## 14.6 Special precautions for users

No special precautions are needed in handling this material

## 14.7 Transport in bulk according to MARPOL 73/78 and the IBC Code

Not applicable

## 15. REGULATORY INFORMATION

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

The product is classified and labelled in accordance with Regulation (EC) No. 1272/2008

### 15.2 Chemical Safety Assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

## 16. OTHER INFORMATION

**Issuing Date** 1987-04-23  
**Revision Date** 2021-04-02  
**Revision Note** (M)SDS sections updated, 3

### Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects

### Additional advice

### EU Country Specific Exposure Limits

Chemical Name	The United Kingdom	Ireland	France	Germany	The Netherlands
Molybdenum(IV) sulfide	STEL 20 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 3 mg/m <sup>3</sup> TWA 0.5 mg/m <sup>3</sup> STEL 9 mg/m <sup>3</sup> STEL 1.5 mg/m <sup>3</sup>			
2-Mercaptobenzothiazole				AGW 4 mg/m <sup>3</sup>	

Chemical Name	Belgium	Switzerland	Austria	Hungary	Czech Republic
Molybdenum(IV) sulfide	TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	STEL 20 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	STEL 60mg/m <sup>3</sup> TWA 15mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> Ceiling 25 mg/m <sup>3</sup>

Chemical Name	Spain	Portugal	Italy	Greece	Romania
Molybdenum(IV) sulfide	TWA 10 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup>		TWA 15 mg/m <sup>3</sup>	STEL 10 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup>



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Chemical Name	Poland	Denmark	Sweden	Finland	Norway
Molybdenum(IV) sulfide	TWA 4 mg/m <sup>3</sup> STEL 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>			TWA 10 mg/m <sup>3</sup> STEL 15 mg/m <sup>3</sup>

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008 as amended.

### Disclaimer

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.