

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 Europe Limited
 Xerox Technology Park
 Dublin Road
 Dundalk
 Co. Louth
 Ireland

For further information, please contact

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For the most current document <https://safetydatasheets.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

General advice	When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance.
Eye contact	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
Skin contact	Wash off immediately with soap and plenty of water, Get medical attention if irritation develops and persists, Wash contaminated clothing before reuse
Inhalation	Not an expected route of exposure, Move to fresh air, If symptoms persist, call a doctor
Ingestion	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

Acute toxicity	
Eyes	Irritating to eyes
Skin	May cause sensitisation by skin contact, Irritating to skin
Inhalation	No known effect
Ingestion	No known effect
Chronic effects	
Chronic toxicity	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

Protection of first-aiders	No special protective equipment required
Notes to physician	Treat symptomatically

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Water spray, Carbon dioxide (CO ₂), Dry chemical, Alcohol-resistant foam, Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable extinguishing media	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_x)

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Other information

Flash point	210 °C	/	410 °F
Method	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

Methods for containment	Prevent further leakage or spillage if safe to do so
Methods for cleaning up	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 ³ TWA: 3 mg/m ³	

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

Environmental Exposure Controls

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

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

Hazardous reactions	None under normal processing
Hazardous polymerisation	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 ³ (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 ³ TWA 10 mg/m ³	TWA 3 mg/m ³ TWA 0.5 mg/m ³ STEL 9 mg/m ³ STEL 1.5 mg/m ³			
2-Mercaptobenzothiazole				AGW 4 mg/m ³	

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

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

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

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

Disclaimer

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