

Safety Data Sheet

SDS #: D-0453

Molybdenum Disulfide Grease

Issuing Date 1987-04-23

Revision Date 2021-03-31

Version 2.01

Active

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

Product Identifier

Product Name
 Molybdenum Disulfide Grease for Xerox Products

Part no. 070P00087

Color Blue-gray, Black
Pure substance/mixture Mixture

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

Recommended Use Lubricant

Details of the supplier of the safety data sheet

Manufactured by Xerox Corporation
 Webster, NY 14580

For further information, please contact

Contact person Manager, Environment, Health, Safety & Sustainability
E-mail address askxerox@xerox.com
Emergency telephone Safety Information US: (800) 275-9376
 Chemical Emergency only (Chemtrec) (800) 424-9300

For the most current document <https://safetysheets.business.xerox.com>

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Label elements

Symbol(s)



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/vapors/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

Other hazards
 No hazard expected under normal conditions of use

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical Name	CAS No.	Weight %	Classification (Reg. 1272/2008)	Hazard Statements
Molybdenum disulfide	1317-33-5	60-70	Eye Irrit 2 Skin Irrit 2	H315 H319
Butoxypolypropylene glycol	9003-13-8	25-35	Eye Irrit 2 Skin Irrit 2	H315 H319
Calcium bis(dinonylnaphthalenesulphonate)	57855-77-3	<1	Skin Irrit. 2 Eye Irrit. 2	--
Additive	90-30-2	<1	Acute Oral 4 Skin Sens 1 STOT RE 2 Aquatic Acute 1 Aquatic Chronic 1	H302 H317 H373 H400 H410
Additive	149-30-4	<1	Acute Oral 4 Skin Sens 1 Aquatic Acute 1 Aquatic Chronic 1	H302 H317 H400 H410

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

Full text of H- statements: see section 16

4. FIRST AID MEASURES

Description of first-aid measures

General advice When symptoms persist or in all cases of doubt seek medical advice. Show this material 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 physician
Ingestion	Never give anything by mouth to an unconscious person, Clean mouth with water, Get medical attention if symptoms occur

Most important symptoms and effects, both acute and delayed

Acute toxicity

Eyes	Irritating to eyes
Skin	May cause sensitization by skin contact Irritating to skin
Inhalation	No known effect
Ingestion	No known effect

Chronic toxicity Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons

Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

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

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous combustion products

Carbon oxides, Sulfur oxides, Nitrogen oxides (NO_x)

Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit

Other information

Flash point	210 °C	/	410 °F
Method	Closed cup		

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

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

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)

Reference to other sections

Material can create slippery conditions

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on 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

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

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

Incompatible products Strong oxidizing agents

Specific end uses

Lubricant

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	ACGIH TLV	OSHA PEL
Molybdenum disulfide	TWA: 10 mg/m ³ TWA: 3 mg/m ³	

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
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

Information on basic physical and chemical properties

Appearance	Paste	Odor	Mild
Physical state	Solid	Odor threshold	No data available
Color	Blue-gray, Black	pH	No data available
Flash point	210 °C / 410 °F	Method	Closed cup
Melting / Freezing Point	Not applicable		
Boiling point/range	No data available		
Softening point	No data available		
Evaporation rate	No data available		
Flammability Limits in Air	No data available		

Vapor pressure	No data available
Vapor 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
Explosive properties	Not explosive
Oxidizing properties	Not applicable

Other information

None

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 reactions	None under normal processing
Hazardous polymerization	Hazardous polymerization does not occur

Conditions to avoid

Excessive heat

Incompatible Materials

Strong oxidizing agents

Hazardous decomposition products

Carbon oxides, Sulfur oxides, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Product Information

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
Molybdenum disulfide			2820 mg/m ³ (Rat) 4 h
Butoxypolypropylene glycol	5840 mg/kg (Rat) 9100 mg/kg (Rat)	13340 mg/kg (Rabbit) 21200 µL/kg (Rabbit)	
Calcium bis(dinonylnaphthalenesulphonate)	5000 mg/kg (Rat)	20000 mg/kg (Rabbit)	18 mg/L (Rat) 1 h
Additive	1625 mg/kg (Rat)	8000 mg/kg (Rabbit)	
Additive	1490 mg/kg (Rat)	7940 mg/kg (Rabbit)	>1270 mg/L (Rat) 7 h

Chronic toxicity

Sensitization	May cause an allergic skin reaction
Neurological Effects	No information available

Target organ effects No information available

CMR Effects

Mutagenic effects No information available
Reproductive toxicity Not determined
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
Additive	2A

Other toxic effects

Aspiration Hazard Not applicable
Other adverse effects No information available

Information on other hazards

Endocrine disrupting properties No information available

12. ECOLOGICAL INFORMATION

Toxicity

Acute Aquatic Toxicity Harmful
Chronic Aquatic Toxicity Harmful

Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Additive	0.25 mg/L EC50 96 h (Pseudokirchneriella subcapitata)	LC50 1.32 - 2.73 mg/L Lepomis macrochirus 96 h LC50= 0.42 mg/L Oncorhynchus mykiss 96 h LC50= 11 mg/L Pimephales promelas 96 h		EC50 = 4.1 mg/L 48 h

Persistence and degradability

No product level data available

Bioaccumulative potential

No product level data available

Mobility in soil

Insoluble in water

Component Information

Chemical Name	log Pow
Additive	2.3 - 2.5

Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

Endocrine disrupting properties

No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods

Dispose of in accordance with all applicable local and national environmental laws and regulations

Contaminated packaging

No special precautions are needed in handling this material

California Waste Status

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION

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

OSHA Regulatory Status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

International Inventories

TSCA

Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS No.	SARA 313 - Threshold Values %
Additive	149-30-4	1.0

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical Name	CAS No.	California Prop. 65
Additive	149-30-4	Carcinogen

U.S. State Right-to-Know Regulations

This product is subject to U.S. State Right-to-know regulations as noted below.

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Molybdenum disulfide	X				
Additive		X			

16. OTHER INFORMATION

Issuing Date 1987-04-23
Revision Date 2021-03-31
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

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

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