

# MATERIAL SAFETY DATA SHEET

## NYOGEL 774F-MS

According to EC Directive 2001/58/EC

### 1. Chemical and company identification

**Name of chemical (Product name)** NYOGEL 774F-MS

**Supplier's company name, address and phone number**

**Company name** Nye Lubricants, Inc.

**Address** 12 Howland Road  
Fairhaven, MA 02719 United States

**Contact person** Nye Lubricants EH&S

**Telephone** General Assistance +1-508-996-6721

**e-mail address** sds@nyelubricants.com

**Emergency telephone number** 3E Online +1-800-451-8346

**Product Code** NYOGEL 774F-MS

**Recommended use of the chemical and restrictions on use**

**Intended use** Lubricating Grease

### 2. Hazards identification

#### GHS classification

The product is not classified according to GHS.

#### GHS label elements

**Pictograms** None.

**Signal words** None.

**Hazard statement** The mixture does not meet the criteria for classification.

#### Precautionary statement

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Other hazards which do not result in classification** None known.

**Supplemental information** None.

#### Main symptoms and emergency overview

**Main symptoms** Direct contact with eyes may cause temporary irritation.

### 3. Composition/information on ingredients

**Substance or mixture** Mixture

Chemical name or generic name	CAS Number	Gazette notification		Concentration (%)
		ENCS no.	ISHL no.	
1-Decene, homopolymer, hydrogenated	68037-01-4	(6)-1109	(6)-1109, 9-2375, 9-3416	15 - 20
1-DODECENE POLYMER WITH 1-DECENE, HYDROGENATED	151006-60-9			15 - 20
1-DODECENE, POLYMER WITH 1-DECENE AND 1-OCTENE, HYDROGENATED	163149-28-8			10 - 20
MOLYBDENUM DISULFIDE	1317-33-5	1-481	(1)-481	5 - 10
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	112945-52-5	(1)-548	(1)-548	5 - 10
ALKYLATED DIPHENYLAMINE	Trade Secret			<= 1
Other components below reportable levels				30 - 35

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**Chemical formula** H[(C8H16)x(C10H20)y(C12H24)z]nH (163149-28-8), O2Si (112945-52-5), Mo-S2 (1317-33-5)

### 4. First aid measures

<b>If inhaled</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>If on skin</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>If in eyes</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>If swallowed</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Protection of first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>Notes to physician</b>	Treat symptomatically.

### 5. Fire-fighting measures

<b>Extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards</b>	During fire, gases hazardous to health may be formed.
<b>Special fire fighting procedures</b>	Use water spray to cool unopened containers.
<b>Protection of fire-fighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

### 7. Handling and storage

<b>Handling</b>	
<b>Technical measures (e.g. Local and general ventilation)</b>	No specific recommendations.
<b>Safe handling advice</b>	Observe good industrial hygiene practices.
<b>Contact avoidance measures</b>	Strong oxidizing agents. For further information, please refer to section 10 of the SDS.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
<b>Storage</b>	
<b>Safe storage conditions</b>	Store away from incompatible materials (see Section 10 of the SDS).
<b>Safe packaging materials</b>	Store in original tightly closed container.

### 8. Exposure controls/personal protection

<b>Control parameters</b>	Follow standard monitoring procedures.
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### Occupational exposure limits

#### Japan. OELs - ISHL (Workplace Environment Assessment Standards)

Components	Type	Value	Form
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE (CAS 112945-52-5)	TLV	0.025 mg/m3	Dust.

#### Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE (CAS 112945-52-5)	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
MOLYBDENUM DISULFIDE (CAS 1317-33-5)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.

### Engineering measures

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Personal protective equipment

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Hand protection

Wear appropriate chemical resistant gloves.

#### Eye protection

Wear safety glasses with side shields (or goggles).

#### Skin and body protection

Wear suitable protective clothing.



## 9. Physical and chemical properties

Physical state	Solid.
Form	Solid.
Color	Not available.
Odor	Not available.
Melting point/freezing point	4307 °F (2375 °C) estimated
Boiling point, initial boiling point, and boiling range	842 °F (450 °C) estimated
Combustibility	Not available.
Lower and upper explosion limit / flammability limit	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Flash point	> 392.0 °F (> 200.0 °C) ASTM D-92
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	Not available.

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Kinematic viscosity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapor pressure	0.00001 hPa estimated
Density and/or relative density	
Density	0.93 g/cm³
Relative density	Not available.
Vapor density	Not available.
Particle characteristics	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Shelf life	4 years
Specific gravity	3.83 estimated

### 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

### 11. Toxicological information

Acute toxicity	28.44% of the mixture consists of component(s) of unknown acute dermal toxicity. 28.44% of the mixture consists of component(s) of unknown acute oral toxicity.
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Components	Species	Test Results
MOLYBDENUM DISULFIDE (CAS 1317-33-5)		
<u>Acute</u>		
Inhalation		
LC50	Rat	2820 mg/l/4h
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE (CAS 112945-52-5)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity		

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### IARC Monographs. Overall Evaluation of Carcinogenicity

SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE  
(CAS 112945-52-5)

3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.

### 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
<b>Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>Bioaccumulation</b>	
<b>Mobility in soil</b>	No data available for this product.
<b>Hazardous to the ozone layer</b>	No data available.
<b>Other hazardous effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>Local disposal regulations</b>	Contract with a disposal operator licensed by the Law on Disposal and Cleaning. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

### 14. Transport information

<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
<b>National regulations</b>	Follow regulation in section 15 for domestic transportation.

### 15. Regulatory information

#### Industrial Safety and Health Act

##### Notifiable substances

MOLYBDENUM AND MOLYBDENUM COMPOUNDS Table 9 Ordinance No. 603 5.0 - 10 %

##### Labeling substances

MOLYBDENUM AND MOLYBDENUM COMPOUNDS 5.0 - 10 %

#### Poisonous and Deleterious Substances Control Act

##### Specified poisonous substances

Not regulated.

##### Poisonous substances

Not regulated.

##### Deleterious substances

Not regulated.

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### Act on the Regulation of Manufacture and Evaluation of Chemical Substances

#### Class I specified chemical substances

Not regulated.

#### Class II specified chemical substances

Not regulated.

#### Monitoring chemical substances

Not regulated.

#### Priority Assessment Chemical Substances (PACs)

Not regulated.

#### Reporting Exempted Substances

Silicon dioxide

### Law concerning Pollutant Release and Transfer Register

#### Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

#### Class 1 substances (substance name, ordinance number and content)

MOLYBDENUM AND ITS COMPOUNDS (AS Ordinance No. 453 6.0 % (MOLYBDENUM DISULFIDE)  
MO)

#### Class 2 substances (substance name, ordinance number and content)

Not regulated.

### Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule

Not regulated.

### Air Law, Enforcement Rule

Not regulated.

### Explosives Control Act

Not regulated.

## 16. Other information

### Bibliography

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
Japan Chemical Industry Association (JCIA) GHS Guideline, June 2019  
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits  
JIS Z 7252:2019 Classification of chemicals based on "Globally Harmonized System of  
Classification and Labelling of Chemicals (GHS)"  
JIS Z 7253:2019 Hazard communication of chemicals based on GHS - Labelling and Safety Data  
Sheet (SDS)  
National Toxicology Program (NTP) Report on Carcinogens

Nye Lubricants, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

### Revision information

This document has undergone significant changes and should be reviewed in its entirety.