

# MATERIAL SAFETY DATA SHEET



## 1. Chemical product and company identification

**A. Product name** NYOGEL 744F-MS  
**Other means of identification**  
**Product Code** NYOGEL 744F-MS

**B. Recommended use and Limitations on use**  
**Recommended use** Lubricating Grease

**C. Supplier information**  
**Company name** Nye Lubricants, Inc.  
A Member of the FUCHS Group  
**Address** 12 Howland Road  
Fairhaven, MA 02179  
USA  
**Telephone** +1 508 996 6721  
**E-mail** sds@fuchs.com

**Emergency telephone number** 080-880-0455  
**Access code** 334212  
**Website** www.nyelubricants.com

## 2. Hazards identification

**A. Hazard category/Classification**  
**Physical hazards** Not classified.  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.

**B. Warning label items including precautionary statement**  
• **Pictogram** None.  
• **Signal word** 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.

**C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

Chemical identity	Common and alternative names	CAS number	ID number	Content in percent (%)
POLYPROPYLENE GLYCOL MONOBUTYLEETHER		9003-13-8	KE-04311	1 - 5
2,5-FURANDIONE, DIHYDRO-3-(OCTADECENYL)-		28777-98-2	KE-10724	0.3 - 5
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		64742-54-7	KE-12546	0.1 - 5
Other components below reportable levels				95 - 100

## 4. First aid measures

**A. In case of eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**B. In case of skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

<b>C. In case of inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>D. In case of swallowing</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>E. Note to physician</b>	Treat symptomatically.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>General advice</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>A. Suitable (and unsuitable) extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>B. Specific hazards arising from the chemical (example: hazardous combustion products)</b>	During fire, gases hazardous to health may be formed.
<b>C. Specific methods of fire-fighting</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Use water spray to cool unopened containers.
<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>A. Personal precautions, protective equipment and emergency measures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the MSDS.
<b>B. Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>C. 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 MSDS.

## 7. Handling and storage

<b>A. Precautions for safe handling</b>	Avoid prolonged exposure. Observe good industrial hygiene practices.
<b>B. Conditions for safe storage (including any incompatibilities)</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the MSDS).

## 8. Exposure controls/personal protection

<b>A. Exposure limit values, biological limit values, etc</b>			
<b>Korea. Exposure Limits for Chemicals and Physical Agents, Occupational Safety and Health Act "K-OSHA" Article 106</b>			
Components	Type	Value	Form
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	TWA	0.8 mg/m <sup>3</sup>	Aerosol.
<b>US. ACGIH Threshold Limit Values (TLV)</b>			
Components	Type	Value	Form
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>B. Appropriate engineering controls</b>	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.		

### C. Personal protective equipment

- **Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. KOSHA Certified respiratory protection not required. In case of insufficient ventilation, wear suitable KOSHA Certified respiratory equipment.
- **Eye protection** Wear KOSHA Certified safety glasses with side shields (or goggles) .
- **Hand protection** Wear appropriate KOSHA Certified chemical resistant gloves. Suitable KOSHA Certified gloves can be recommended by the glove supplier.
- **Body protection** Wear suitable protective clothing.

**Hygiene measures** 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.

## 9. Physical and chemical properties

<b>A. Appearance</b>	Smooth
<b>Physical state</b>	Solid.
<b>Form</b>	Solid. Semi-solid
<b>Color</b>	Gray Black
<b>B. Odor</b>	Not available.
<b>C. Odor threshold</b>	Not available.
<b>D. pH</b>	Not available.
<b>E. Melting point/freezing point</b>	Not available.
<b>F. Boiling point, initial boiling point, and boiling range</b>	Not available.
<b>G. Flash point</b>	Not available.
<b>H. Evaporation rate</b>	Not available.
<b>I. Flammability (solid, gas)</b>	Not available.
<b>J. Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>K. Vapor pressure</b>	Not available.
<b>L. Solubility</b>	
<b>Solubility (water)</b>	Not available.
<b>M. Vapor density</b>	Not available.
<b>N. Specific gravity</b>	Not available.
<b>O. n-octanol/water partition coefficient</b>	Not available.
<b>P. Auto-ignition temperature</b>	Not available.
<b>Q. Decomposition temperature</b>	Not available.
<b>R. Viscosity</b>	Not available.
<b>S. Molecular weight</b>	Not available.
<b>Other data</b>	
<b>Density</b>	0.99 g/cm <sup>3</sup>
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Shelf life</b>	4 years

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>A. Stability and hazardous reaction potential</b>	
<b>Stability</b>	Material is stable under normal conditions.
<b>Hazardous reaction potential</b>	No dangerous reaction known under conditions of normal use.
<b>B. Conditions to avoid (e.g. static discharge, shock or vibration, etc)</b>	Contact with incompatible materials.
<b>C. Incompatible materials</b>	Strong oxidizing agents.
<b>D. Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### A. Information on likely routes of exposure

- **Respiratory organs** Prolonged inhalation may be harmful.
- **Skin** No adverse effects due to skin contact are expected.
- **Eyes** Direct contact with eyes may cause temporary irritation.
- **Mouth** Expected to be a low ingestion hazard.

### B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)**

Components	Species	Test Results
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POLYPROPYLENE GLYCOL MONOBUTYLETHER (CAS 9003-13-8)

#### Acute

#### **Dermal**

LD50	Rabbit	21 g/kg
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#### **Oral**

LD50	Rat	5.84 g/kg
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- **Corrosivity or irritation to the skin** Prolonged skin contact may cause temporary irritation.
- **Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.
- **Respiratory sensitization** Not a respiratory sensitizer.
- **Skin sensitization** This product is not expected to cause skin sensitization.
- **Carcinogenic properties /Carcinogenicity**

#### **IARC Monographs. Overall Evaluation of Carcinogenicity**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7) 3 Not classifiable as to carcinogenicity to humans.

- **Mutagenic properties /Mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- **Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.
- **Specific target organ toxicity - single exposure** Not classified.
- **Specific target organ toxicity - repeated exposure** Not classified.
- **Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

- A. Ecotoxicity**

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.

**Hazardous to the aquatic environment, acute hazard** 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/degradability** No data is available on the degradability of any ingredients in the mixture.
- C. Bioaccumulative potential** No data available.
- D. Mobility in soil** No data available for this product.
- E. Other adverse effects** 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

- A. Method of disposal** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
- B. Disposal considerations (including disposal of contaminated containers or packaging)** 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.
- Waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

## 14. Transport information

### National regulations

#### KSSTDG

- A. UN number Not regulated as dangerous goods.  
B. UN proper shipping name Not regulated as dangerous goods.  
C. Transport hazard class(es)  
    Class Not assigned.  
    Subsidiary hazard -  
D. Packing group -  
E. Environmental hazards  
    Marine pollutant No.  
    EmS Not assigned.  
F. Special precautions for user Not assigned.

### International regulations

#### IATA

- A. UN number Not regulated as dangerous goods.  
B. UN proper shipping name Not regulated as dangerous goods.  
C. Transport hazard class(es)  
    Class Not assigned.  
    Subsidiary hazard -  
D. Packing group -  
E. Environmental hazards No.  
F. Special precautions for user Not assigned.

#### IMDG

- A. UN number Not regulated as dangerous goods.  
B. UN proper shipping name Not regulated as dangerous goods.  
C. Transport hazard class(es)  
    Class Not assigned.  
    Subsidiary hazard -  
D. Packing group -  
E. Environmental hazards  
    Marine pollutant No.  
    EmS Not assigned.  
F. Special precautions for user Not assigned.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

### A. Restrictions under the Industrial Safety and Health Law

#### Harmful Substances Prohibited from Manufacturing

Not regulated.

#### Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

#### Controlled Hazardous Substances

Not regulated.

#### Harmful Substances Requiring Special Medical Examination

Not regulated.

#### Workplace Environmental Monitoring Harmful Materials

Not regulated.

#### Occupational Exposure Limit

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)

### B. Restrictions under the Chemicals Control Law (Previously Toxic Chemicals Control Law)

#### Accidental Release Prevention Substances

Not regulated.

#### Act on the Registration and Evaluation of Chemicals

##### Banned Toxic Chemicals

Not regulated.

**Designated Existing Chemicals Subject to Registration (PEC) (MoE No. 2015-92)**

Not listed.

**Restricted Chemical Substances**

Not regulated.

**Toxic Chemicals**

Not regulated.

**C. Restrictions under the Dangerous Substance Safety Management Act****D. Restrictions under the Wastes Control Act****Halogenated Materials in Waste Organic Solvents**

Not regulated.

**Hazardous Substances**

Not regulated.

**E. Restrictions under other foreign or domestic laws****Clean Air Conservation Act****Air Pollutants**

PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)

**Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides (Rules on PIC, MoE No. 2014-252, Dec. 31, 2014; Standards for Pesticides, RDA No. 2014-26), as amended**

Not listed.

**Specific Air Pollutants**

Not regulated.

**Further information**

This material safety data sheet was prepared in accordance with Ministry of Employment and Labor Notice No 2020-130.

**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Korea	Existing Chemicals List (ECL)	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information****A. Source of information**

ACGIH  
 EPA: ACQUIRE database  
 Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)  
 Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)  
 NLM: Hazardous Substances Data Base  
 US. IARC Monographs on Occupational Exposures to Chemical Agents  
 Korea. GHS Labeling Requirements. Standards for Classification and Labeling of Chemical Substances and Material Safety Data Sheets (MSDS), as amended  
 Korea. KOSHA GHS Classifications List (Korea Occupational Safety & Health Agency)  
 Korea. NEMA GHS Classification List (National Emergency Management Agency GHS Guidance for Classification and Labeling for Dangerous Goods)  
 Toxic Release Inventory (TRI) Chemicals (MOE Public Notice No. 2002-166, Nov. 8, 2002), as amended

**B. Issue date**

May-05-2011

**C. Number of revisions and date of most recent revision**

September-10-2024 (10 revision)

**D. Other**

Not available.

**Disclaimer**

Nye Lubricants, Inc. A Member of the FUCHS Group 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**

Hazards identification: C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)

Composition / Information on Ingredients: Ingredients

Exposure controls/personal protection: • Eye protection

Regulatory information: Further information

Other information: A. Source of information