

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** AFJ GREASE

**Other means of identification**

**SDS number** 1030-T20960-1

**Product code** AFJ+70, AFJ+400

**Recommended use** Industrial lubricating grease (Package size 70gr and 400gr)

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

THK Co.,LTD  
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## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** None.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash skin with soap and water.

**Storage** Store away from incompatible materials.

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

**Hazard(s) not otherwise classified (HNOC)** Not classified.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Distillates (petroleum), hydrotreated heavy paraffinic	Proprietary	75-85
Molybdenum, bis (dibutylcarbamodithioato) di-mu-oxodioxodi-, sulfurized	Proprietary	2-5
Molybdenum, bis (ditridecylcarbamodithioato) di-mu-oxodioxo-di-, sulfurized	Proprietary	2-5
Zinc bis(dinonylnaphthalenesulphonate)	Proprietary	2-5

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

**Composition comments** \* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

<b>Inhalation</b>	Move affected person into fresh air and keep warm. If breathing is difficult, give oxygen. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Flush thoroughly with water. If irritation occurs, get medical assistance. Make sure to remove any contact lenses from the eyes before rinsing.
<b>Ingestion</b>	Immediately rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
<b>Most important symptoms/effects, acute and delayed</b>	Prolonged or repeated skin contact may cause irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically. The effects might be delayed.
<b>General information</b>	First aid personnel must be aware of own risk during rescue.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder.
<b>Unsuitable extinguishing media</b>	Do not use water or halogenated extinguishing media.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Containers close to fire should be removed or cooled with water.
<b>General fire hazards</b>	The product is not flammable.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid contact with skin. Wear suitable protective clothing, gloves and eye/face protection. In case of spills, beware of slippery floors and surfaces.
<b>Methods and materials for containment and cleaning up</b>	Absorb spillage with non-combustible, absorbent material. Clean contaminated area with oil-removing material. For waste disposal, see Section 13 of the SDS.
<b>Environmental precautions</b>	Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged and repeated contact with grease, particularly used grease. Always remove grease with soap and water or skin cleaning agent, never use organic solvents. Wear appropriate personal protective equipment. Be aware of potential for surfaces to become slippery. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep container in a well-ventilated place. Store away from incompatible materials.

#### 8. Exposure controls/personal protection

##### Occupational exposure limits

##### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic	PEL	5 mg/m <sup>3</sup>	Mist.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Molybdenum, bis (dibutylcarbamodithioato) di-mu-oxodioxodi-, sulfurized	PEL	15 mg/m3	Total dust.
Molybdenum, bis (ditridecylcarbamodithioato) di-mu-oxodioxo-di-, sulfurized	PEL	15 mg/m3	Total dust.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic	TWA	5 mg/m3	Inhalable fraction.
Molybdenum, bis (dibutylcarbamodithioato) di-mu-oxodioxodi-, sulfurized	TWA	3 mg/m3	Respirable fraction.
Molybdenum, bis (ditridecylcarbamodithioato) di-mu-oxodioxo-di-, sulfurized	TWA	10 mg/m3 3 mg/m3	Inhalable fraction. Respirable fraction.
		10 mg/m3	Inhalable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy paraffinic	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	No exposure standards allocated.
<b>Appropriate engineering controls</b>	Provide adequate ventilation and minimize the risk of inhalation of vapors and oil mist. Provide access to washing facilities including soap, skin cleanser and fatty cream.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear approved safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
<b>Skin protection</b>	
<b>Other</b>	Wear appropriate clothing to prevent repeated or prolonged skin contact.
<b>Respiratory protection</b>	In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with particulate filter and organic vapor cartridges can be used. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
<b>Thermal hazards</b>	When material is heated, wear gloves to protect against thermal burns.
<b>General hygiene considerations</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.

## 9. Physical and chemical properties

<b>Appearance</b>	Paste.
<b>Physical state</b>	Solid.
<b>Form</b>	Paste. Soft, malleable.
<b>Color</b>	Dark yellow.
<b>Odor</b>	Slight.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	365 °F (185 °C)
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	410.0 °F (210.0 °C) Setaf flash
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	0.87
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Heat, sparks, flames, elevated temperatures.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides. Metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation of oil mist or vapors formed during heating of the product will irritate the respiratory system and provoke coughing.
<b>Skin contact</b>	Prolonged or frequent contact may cause redness, itching, irritation, eczema/chaps and oil acne. The harmful effects may increase when exposed to used grease.
<b>Eye contact</b>	May cause eye irritation on direct contact.
<b>Ingestion</b>	Ingestion may cause irritation and malaise.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Not available.
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<b>Skin corrosion/irritation</b>	May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	May cause eye irritation on direct contact.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	None known.
<b>Skin sensitization</b>	None known.
<b>Germ cell mutagenicity</b>	None known.
<b>Carcinogenicity</b>	Prolonged and repeated contact with used grease may cause serious skin diseases, such as dermatitis and skin cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**NTP Report on Carcinogens**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

<b>Reproductive toxicity</b>	None known.
<b>Specific target organ toxicity - single exposure</b>	None known.
<b>Specific target organ toxicity - repeated exposure</b>	None known.
<b>Aspiration hazard</b>	None known.
<b>Chronic effects</b>	None known.

**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>	None known.
<b>Bioaccumulative potential</b>	None known.
<b>Mobility in soil</b>	Not available.
<b>Mobility in general</b>	The product is insoluble in water and will spread on water surfaces.
<b>Other adverse effects</b>	Not available.

**13. Disposal considerations**

<b>Disposal instructions</b>	Dispose of in accordance with local regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose in accordance with applicable federal, state, and local regulations.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

<b>DOT</b>	Not regulated as dangerous goods.
<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 available.

**15. Regulatory information**

<b>US federal regulations</b>	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.
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**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Zinc bis(dinonylnaphthalenesulphonate) (CAS Proprietary) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Zinc bis(dinonylnaphthalenesulphonate)	Proprietary	2-5

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS Proprietary)

**US. New Jersey Worker and Community Right-to-Know Act**Distillates (petroleum), hydrotreated heavy paraffinic (CAS Proprietary)  
Zinc bis(dinonylnaphthalenesulphonate) (CAS Proprietary)**US. Pennsylvania Worker and Community Right-to-Know Law**Distillates (petroleum), hydrotreated heavy paraffinic (CAS Proprietary)  
Zinc bis(dinonylnaphthalenesulphonate) (CAS Proprietary)**US. Rhode Island RTK**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS Proprietary)

**California Proposition 65**California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS Proprietary)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies 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, including date of preparation or last revision

<b>Issue date</b>	01-October-2013
<b>Revision date</b>	12-January-2018
<b>Version #</b>	03
<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA. B - Safety Glasses, Gloves
<b>HMIS® ratings</b>	Health: 0 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	



### List of abbreviations

#### Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

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