

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**Inhalation**

Move affected person into fresh air and keep warm. If breathing is difficult, give oxygen. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Flush thoroughly with water. If irritation occurs, get medical assistance. Make sure to remove any contact lenses from the eyes before rinsing.

Ingestion

Immediately rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Prolonged or repeated skin contact may cause irritation.

Indication of immediate medical attention and special treatment needed

Treat symptomatically. The effects might be delayed.

General information

First aid personnel must be aware of own risk during rescue.

5. Fire-fighting measures**Suitable extinguishing media**

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water or halogenated extinguishing media.

Specific hazards arising from the chemical

Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized.

Special protective equipment and precautions for firefighters

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.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Containers close to fire should be removed or cooled with water.

General fire hazards

The product is not flammable.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin. Wear suitable protective clothing, gloves and eye/face protection. In case of spills, beware of slippery floors and surfaces.

Methods and materials for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. Clean contaminated area with oil-removing material. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage**Precautions for safe handling**

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.

Conditions for safe storage, including any incompatibilities

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 ³	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	Inhalable fraction.
		3 mg/m3	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.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

No exposure standards allocated.

Appropriate engineering controls

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.

Individual protection measures, such as personal protective equipment
Eye/face protection

Wear approved safety goggles.

Skin protection
Hand protection

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.

Skin protection
Other

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection

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.

Thermal hazards

When material is heated, wear gloves to protect against thermal burns.

General hygiene considerations

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

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

10. Stability and reactivity

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

11. Toxicological information

Information on likely routes of exposure

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

Information on toxicological effects

Acute toxicity	Not available.
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Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	May cause eye irritation on direct contact.
Respiratory or skin sensitization	
Respiratory sensitization	None known.
Skin sensitization	None known.
Germ cell mutagenicity	None known.
Carcinogenicity	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.	
Reproductive toxicity	None known.
Specific target organ toxicity - single exposure	None known.
Specific target organ toxicity - repeated exposure	None known.
Aspiration hazard	None known.
Chronic effects	None known.

12. Ecological information

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.
Persistence and degradability	None known.
Bioaccumulative potential	None known.
Mobility in soil	Not available.
Mobility in general	The product is insoluble in water and will spread on water surfaces.
Other adverse effects	Not available.

13. Disposal considerations

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

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

15. Regulatory information

US federal regulations	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 Listed.
Proprietary)**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 ActDistillates (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 65California 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.**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

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



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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