

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** AFA GREASE

**Other means of identification**

**SDS number** 1030-T21995-1

**Product code** AFA+70, AFA+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** Sensitization, skin Category 1

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Warning

**Hazard statement** May cause an allergic skin reaction.

**Precautionary statement**

**Prevention** Avoid breathing vapor. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

**Response** If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name   | CAS number  | %    |
|---|-------------|------|
| Organic compound  | Proprietary | 1-15 |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | Proprietary | 1-5  |
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts         | Proprietary | 1-2  |

\*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>   | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. |
| <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>                     | May cause an allergic skin reaction.  |
| <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 and eyes. 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.  |
| <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 contact with skin and eyes. Avoid contact with skin. 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

|   |  |
|---|--|
| <b>Occupational exposure limits</b>     | No exposure limits noted for ingredient(s).  |
| <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. |

## Individual protection measures, such as personal protective equipment

|                                       |   |
|---------------------------------------|---|
| <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>                                   | Buttery.  |
| <b>Physical state</b>                               | Solid.  |
| <b>Form</b>   | Buttery.  |
| <b>Color</b>  | Brown.  |
| <b>Odor</b>   | Mild.   |
| <b>Odor threshold</b>                               | Not available.                                      |
| <b>pH</b>   | Not applicable.                                     |
| <b>Melting point/freezing point</b>                 | Not available.                                      |
| <b>Initial boiling point and boiling range</b>      | Not available.                                      |
| <b>Flash point</b>                                  | 393.8 °F (201.0 °C) Setaflash Closed Cup (ISO 3679) |
| <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>                             | 0.9 g/cm <sup>3</sup>                               |
| <b>Solubility(ies)</b>                              |   |
| <b>Solubility (water)</b>                           | Not available.                                      |
| <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. Nitrogen oxides (NOx). Sulfur oxides. Sodium oxides. Phosphorus oxides. Calcium oxides. Silicon oxides. Aluminum oxides. Formaldehyde. PAH (polycyclic aromatic hydrocarbons). |

## 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.                                 |
| <b>Eye contact</b>  | May cause eye irritation on direct contact.  |
| <b>Ingestion</b>    | Ingestion may cause irritation and malaise.  |

**Symptoms related to the physical, chemical and toxicological characteristics** May cause eczema-like skin disorders (dermatitis).

### Information on toxicological effects

**Acute toxicity** May cause discomfort if swallowed.

| Components  | Species  | Test Results      |
|---|--|-------------------|
| Sodium nitrite (CAS Proprietary)                                      |  |                   |
| <b>Acute</b>  |  |                   |
| <b>Inhalation</b>   |  |                   |
| LC50  | Rat  | 5.5 mg/l, 4 Hours |
| <b>Oral</b>   |  |                   |
| LD50  | Rat  | 158 mg/kg         |
| <b>Skin corrosion/irritation</b>                                      | Prolonged skin contact may cause temporary 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>   | May cause an allergic skin reaction.                   |                   |
| <b>Germ cell mutagenicity</b>   | None known.  |                   |
| <b>Carcinogenicity</b>  | None known.  |                   |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |  |                   |
| Not listed.   |  |                   |
| <b>NTP Report on Carcinogens</b>                                      |  |                   |
| Not listed.   |  |                   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b> |  |                   |
| 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

**Ecotoxicity** The product contains a substance which is very toxic to aquatic organisms.

| Components                           | Species   | Test Results   |
|--------------------------------------|---|--|
| Sodium nitrite (CAS Proprietary)     |   |  |
| <b>Aquatic</b>                       |   |  |
| Crustacea                            | EC50  | Greasyback shrimp (Metapenaeus ensis)                |
| Fish                                 | LC50  | Rainbow trout, donaldson trout (Oncorhynchus mykiss) |
| <b>Persistence and degradability</b> | None known.   |  |
| <b>Bioaccumulative potential</b>     | None known.   |  |
| <b>Mobility in soil</b>              | Not known.  |  |
| <b>Mobility in general</b>           | The product contains substances, which are insoluble in water and which may 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

#### 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

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Sodium nitrite (CAS Proprietary) 1.0 % One-Time Export Notification only.

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

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (CAS Proprietary) Listed.

Sodium nitrite (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** Yes

**Classified hazard categories** Respiratory or skin sensitization

##### SARA 313 (TRI reporting)

| Chemical name   | CAS number  | % by wt. |
|---|-------------|----------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | Proprietary | 1-2      |

## 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

Sodium nitrite (CAS Proprietary)

### US. New Jersey Worker and Community Right-to-Know Act

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (CAS Proprietary)

Sodium nitrite (CAS Proprietary)

### US. Pennsylvania Worker and Community Right-to-Know Law

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (CAS Proprietary)

Sodium nitrite (CAS Proprietary)

### US. Rhode Island RTK

Not regulated.

### 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).

## 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)                                    | Yes                    |
| 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)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | 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. C - Safety Glasses, Gloves, Apron |
| HMIS® ratings       | Health: 2<br>Flammability: 0<br>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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