

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture AFF GREASE
Registration number -
Synonyms None.
SDS number 1030-T25002-2
Product code AFF+70, AFF+400
Issue date 17-February-2012
Version number 03
Revision date 18-September-2019
Supersedes date 04-December-2015

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Industrial lubricating grease (Package size 70gr and 400gr)
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

THK Co.,LTD
HEAD OFFICE: 2-12-10, Shibaura, Minato-ku, Tokyo 108-8506 Japan
THK GmbH: Kaiserswerther Strasse 115, D-40880 Ratingen, Germany
Telephone +49-(0)2102-7425-555 (THK GmbH)
E-mail info-msds@thk.eu (THK GmbH), thk022@thk.co.jp (THK Co., LTD)
1.4. Emergency telephone number +49-(0) 2102-7425-222 at workday 8 am - 5 pm (THK GmbH)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards
Skin sensitisation Category 1 H317 - May cause an allergic skin reaction.
Environmental hazards
Hazardous to the aquatic environment, long-term aquatic hazard Category 3 H412 - Harmful to aquatic life with long lasting effects.

Hazard summary Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing. May cause an allergic skin reaction. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: N-1-naphthylaniline

Hazard pictograms



Signal word Warning

Hazard statements

H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261 Avoid breathing vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273	Avoid release to the environment.
Response	
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
Storage	Store away from incompatible materials.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	None.
2.3. Other hazards	This mixture does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII. Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing. Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/chapping and oil acne. The harmful effects may increase in used grease. Prolonged and repeated contact with used grease may cause serious skin diseases.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Diphenyl phosphonate	1 - 5	Proprietary 225-202-8	-	-	
Classification:	Acute Tox. 4;H302, Skin Irrit. 2;H315, Eye Irrit. 2;H319				
N-1-naphthylaniline	1 - 5	Proprietary 201-983-0	-	-	
Classification:	Acute Tox. 4;H302, Skin Sens. 1;H317, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 1;H410				
2,6-di-tert-butyl-4-methylphenol	< 1	128-37-0 204-881-4	-	-	
Classification:	Aquatic Chronic 1;H410				

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

SECTION 4: First aid measures

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

4.1. Description of 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	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.
Eye contact	Immediately flush eye(s) with plenty of water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
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.

4.2. Most important symptoms and effects, both acute and delayed May cause allergic skin reaction. Irritation of nose and throat.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards The product is not flammable.

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Do not use water or halogenated extinguishing media.

5.2. Special hazards arising from the substance or mixture Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterised.

5.3. Advice for firefighters

Special protective equipment 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.

Special fire fighting procedures

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid inhalation of vapours and contact with skin and eyes. Wear necessary protective equipment. In case of spills, beware of slippery floors and surfaces.

For emergency responders

Keep unnecessary personnel away.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. 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. Avoid inhalation of vapours and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Keep container in a well-ventilated place. Store away from incompatible materials.

7.3. Specific end use(s)

Industrial lubricating grease.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components

Type

Value

2,6-di-tert-butyl-4-methylphenol (CAS 128-37-0)

TWA

10 mg/m³

Biological limit values

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

Recommended monitoring procedures

Follow the schedule for work place measurements.

Derived no effect levels (DNELs)

Not available.

Predicted no effect concentrations (PNECs)

Not available.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation and minimise the risk of inhalation of vapours and oil mist. Provide access to washing facilities including soap, skin cleanser and fatty cream.

Individual protection measures, such as personal protective equipment

General information

Use personal protective equipment as required. Keep working clothes separately. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear approved safety goggles.

Skin protection

- Hand protection	Wear protective gloves. Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement rules are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove manufacturer and model.
- 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 combination filter (type A2/P2) can be used.
Thermal hazards	When material is heated, wear gloves to protect against thermal burns.
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.
Environmental exposure controls	Contain spills and prevent releases and observe national regulations on emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Buttery.
Physical state	Solid.
Form	Paste.
Colour	Light yellow.
Odour	Slight.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
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.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity This product may react with strong oxidising agents.

10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Heat, sparks, flames, elevated temperatures.
10.5. Incompatible materials	Oxidizing agents. Acids. Halogens. Halogenated compounds.
10.6. Hazardous decomposition products	Carbon oxides. Aldehydes.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.
Skin contact	May cause sensitisation by skin contact. Prolonged or frequent contact may cause redness, itching, irritation, eczema/chaps and oil acne.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Ingestion may cause irritation and malaise.

Symptoms May cause an allergic skin reaction. Irritation of nose and throat.

11.1. Information on toxicological effects

Acute toxicity The harmful effects may increase in used grease.

Components	Species	Test Results
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N-1-naphthylaniline (CAS Proprietary)

Acute

Oral

LD50	Rat	1625 mg/kg
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Skin corrosion/irritation May cause skin irritation. May cause an allergic skin reaction.

Serious eye damage/eye irritation May cause eye irritation on direct contact. May cause redness and pain.

Respiratory sensitisation Due to lack of data the classification is not possible.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,6-di-tert-butyl-4-methylphenol (CAS 128-37-0)	3 Not classifiable as to carcinogenicity to humans.
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Reproductive toxicity Due to lack of data the classification is not possible.

Specific target organ toxicity - single exposure Due to lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to lack of data the classification is not possible.

Aspiration hazard Due to the high viscosity the product is not an aspiration hazard.

Mixture versus substance information The product is a mixture.

Other information No data available.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability None known.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

N-1-naphthylaniline	4.2
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Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil The product is insoluble in water.

Mobility in general The product contains substances, which are insoluble in water and which may spread on water surfaces.

12.5. Results of PBT and vPvB assessment This mixture does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers retain product residue, follow label warnings even after container is emptied.

EU waste code 16 03 05*

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.
LD50: Lethal Dose, 50%.

References

EU Regulation (EC) 1272/2008 (CLP Regulation) as amended

Information on evaluation method leading to the classification of mixture

The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.

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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