# SAFETY DATA SHEET

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## 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** -

**UFI:**

Austria: D200-U0CW-500F-QWA0
Belgium: D200-U0CW-500F-QWA0
Bulgaria: D200-U0CW-500F-QWA0
Croatia: D200-U0CW-500F-QWA0
Cyprus: D200-U0CW-500F-QWA0
Czech Republic: D200-U0CW-500F-QWA0
Denmark: D200-U0CW-500F-QWA0
EU: D200-U0CW-500F-QWA0
Estonia: D200-U0CW-500F-QWA0
Finland: D200-U0CW-500F-QWA0
France: D200-U0CW-500F-QWA0
Germany: D200-U0CW-500F-QWA0
Great Britain: D200-U0CW-500F-QWA0
Greece: D200-U0CW-500F-QWA0
Hungary: D200-U0CW-500F-QWA0
Iceland: D200-U0CW-500F-QWA0
Ireland: D200-U0CW-500F-QWA0
Italy: D200-U0CW-500F-QWA0
Latvia: D200-U0CW-500F-QWA0
Lithuania: D200-U0CW-500F-QWA0
Luxembourg: D200-U0CW-500F-QWA0
Malta: D200-U0CW-500F-QWA0
Netherlands: D200-U0CW-500F-QWA0
Norway: D200-U0CW-500F-QWA0
Poland: D200-U0CW-500F-QWA0
Portugal: D200-U0CW-500F-QWA0
Romania: D200-U0CW-500F-QWA0
Slovakia: D200-U0CW-500F-QWA0
Slovenia: D200-U0CW-500F-QWA0
Spain: D200-U0CW-500F-QWA0
Sweden: D200-U0CW-500F-QWA0

**Synonyms** None.

**SDS number** 1030-T25002-2

**Product code** AFF+70, AFF+400

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

**Identified uses** Industrial lubricating grease

**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. |
| Germ cell mutagenicity | Category 2 | H341 - Suspected of causing genetic defects. |
| **Environmental hazards** | | |
| Hazardous to the aquatic environment, long-term aquatic hazard | Category 3 | H412 - Harmful to aquatic life with long lasting effects. |

**2.2. Label elements**

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

**Contains:** Diphenyl phosphonate, N-1-naphthylaniline

**Hazard pictograms**

**Signal word** Warning

**Hazard statements**

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H341 | Suspected of causing genetic defects. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary statements**

**Prevention**

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P261 | Avoid breathing mist/vapours. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves. |

**Response**

| | |
|---|---|
| P302 + P352 | IF ON SKIN: Wash with plenty of water. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

**Storage** Not available.

**Disposal** Not available.

**Supplemental information on the label** None.

**2.3. Other hazards** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight. The mixture does not contain any substances having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1% by weight.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

**General information**

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|---|---|---|---|---|
| N-1-naphthylaniline | 1 - 5 | 90-30-2<br>201-983-0 | - | - | |
| **Classification:** Acute Tox. 4;H302;(ATE: 1625 mg/kg bw), Skin Sens. 1B;H317, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 1;H410 | | | | | |
| Hydrocarbon waxes (petroleum), oxidized, Me esters | 2 | 68602-85-7<br>271-626-1 | - | - | |
| **Classification:** Eye Irrit. 2;H319 | | | | | |
| Diphenyl phosphonate | 1 | 4712-55-4<br>225-202-8 | - | - | |
| **Classification:** Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Skin Irrit. 2;H315, Eye Irrit. 2;H319, Skin Sens. 1;H317, Muta. 2;H341, STOT RE 2;H373, Aquatic Acute 1;H400, Aquatic Chronic 2;H411 | | | | | |

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|---|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol | < 1 | 128-37-0<br>204-881-4 | - | - | |

**Classification:** Aquatic Acute 1;H400, Aquatic Chronic 1;H410

**List of abbreviations and symbols that may be used above**

ATE: Acute toxicity estimate.
#: This substance has been assigned Union workplace exposure limit(s).

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits. The exact concentrations of the above listed chemicals are being withheld as a trade secret. The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

**4.1. Description of first aid measures**

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** May cause an allergic skin reaction. Dermatitis. Rash.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** Will burn if involved in a fire.

**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** Self-contained breathing apparatus 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. Use water spray to cool unopened containers.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of spills, beware of slippery floors and surfaces.

**For emergency responders** Keep unnecessary personnel away. Ensure adequate ventilation. Be aware of potential for surfaces to become slippery. Local authorities should be advised if significant spillages cannot be contained.

**6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up** Prevent product from entering drains. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. The product is insoluble in water and will spread on the water surface.

**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 breathing mist/vapour. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Avoid prolonged and repeated contact with grease, particularly used grease. When working with heated grease, mechanical ventilation may be required. Be aware of potential for surfaces to become slippery. Always remove grease with soap and water or skin cleaning agent, never use organic solvents.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

**7.3. Specific end use(s)**

Industrial lubricating grease. Observe industrial sector guidance on best practices.

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Occupational exposure limits**

**Austria. MAK List**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | MAK | 10 mg/m3 |

**Belgium. Exposure Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 2 mg/m3 | Vapour and aerosol. |
| Lithium stearate (CAS 4485-12-5) | TWA | 10 mg/m3 | |
| Mineral oil | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | STEL | 50 mg/m3 |
| | TWA | 10 mg/m3 |
| Mineral oil | TWA | 5 mg/m3 |

**Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | MAC | 10 mg/m3 |

**Czech Republic. OELs. Government Decree 361**

| Components | Type | Value | Form |
|---|---|---|---|
| Mineral oil | Ceiling | 10 mg/m3 | Aerosol |
| | TWA | 5 mg/m3 | Aerosol |

**Denmark. Exposure Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TLV | 10 mg/m3 | |
| Mineral oil | TLV | 1 mg/m3 | Mist. |

**Finland. Workplace Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | STEL | 20 mg/m3 | |
| | TWA | 10 mg/m3 | |
| Mineral oil | TWA | 5 mg/m3 | Mist. |

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | VME | 10 mg/m3 |

**Regulatory status:** Indicative limit (VL)

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 | Vapor and aerosol, inhalable fraction. |
| Mineral oil | TWA | 5 mg/m3 | Respirable fraction. |
| N-1-naphthylaniline (CAS 90-30-2) | TWA | 2 mg/m3 | Inhalable fraction. |

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | AGW | 10 mg/m3 | Inhalable fraction. |
| N-1-naphthylaniline (CAS 90-30-2) | AGW | 2 mg/m3 | Inhalable fraction. |

**Greece. OELs (Decree No. 90/1999, as amended)**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 | |
| Mineral oil | TWA | 5 mg/m3 | Mist. |

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

| Components | Type | Value |
|---|---|---|
| Mineral oil | TWA | 5 mg/m3 |

**Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 | |
| Mineral oil | TWA | 1 mg/m3 | Mist. |

**Ireland. Occupational Exposure Limits**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 2 mg/m3 |
| Lithium stearate (CAS 4485-12-5) | TWA | 10 mg/m3 |

**Italy. OELs**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 2 mg/m3 | Inhalable fraction and vapour. |
| Lithium stearate (CAS 4485-12-5) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Inhalable fraction. |
| Mineral oil | TWA | 5 mg/m3 | Inhalable fraction. |

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

| Components | Type | Value |
|---|---|---|
| Mineral oil | TWA | 5 mg/m3 |

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)**

| Components | Type | Value | Form |
|---|---|---|---|
| Lithium stearate (CAS 4485-12-5) | TWA | 5 mg/m3 | |
| Mineral oil | STEL | 3 mg/m3 | Fume and mist. |
| | TWA | 1 mg/m3 | Fume and mist. |

**Netherlands. OELs (binding)**

| Components | Type | Value | Form |
|---|---|---|---|
| Mineral oil | TWA | 5 mg/m3 | Mist. |

**Norway. Administrative Norms for Contaminants in the Workplace**

| Components | Type | Value | Form |
|---|---|---|---|
| Mineral oil | TLV | 1 mg/m3 | Mist. |

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 2 mg/m3 | Inhalable fraction and vapour. |
| Lithium stearate (CAS 4485-12-5) | TWA | 10 mg/m3 | |
| Mineral oil | TWA | 5 mg/m3 | Inhalable fraction. |

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

| Components | Type | Value |
|---|---|---|
| Mineral oil | STEL | 10 mg/m3 |
| | TWA | 5 mg/m3 |

**Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents**

| Components | Type | Value | Form |
|---|---|---|---|
| Mineral oil | TWA | 1 mg/m3 | Fume and mist. |
| | | 5 ppm | Fume and mist. |

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

| Components | Type | Value | Form |
|---|---|---|---|
| Mineral oil | STEL | 3 mg/m3 | Fume and mist. |
| | | 15 ppm | Fume and mist. |

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 | Inhalable fraction. |

**Spain. Occupational Exposure Limits**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 | |
| Lithium stearate (CAS 4485-12-5) | TWA | 10 mg/m3 | |
| Mineral oil | STEL | 10 mg/m3 | Mist. |
| | TWA | 5 mg/m3 | Mist. |

**Sweden. OELs (Annex 1). Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2018:1), as amended**

| Components | Type | Value | Form |
|---|---|---|---|
| Lithium stearate (CAS 4485-12-5) | Ceiling | 0,02 mg/m3 | Inhalable dust. |
| | TWA | 5 mg/m3 | Total dust. |
| Mineral oil | STEL | 3 mg/m3 | Mist. |
| | TWA | 1 mg/m3 | Mist. |

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

| Components | Type | Value | Form |
|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | STEL | 40 mg/m3 | Vapor and aerosol, inhalable. |
| | TWA | 10 mg/m3 | Vapor and aerosol, inhalable. |
| Mineral oil | TWA | 5 mg/m3 | Inhalable fraction. |

**UK. EH40 Workplace Exposure Limits (WELs)**

| Components | Type | Value |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | TWA | 10 mg/m3 |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**8.2. Exposure controls**

**Appropriate engineering controls** 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.

**Individual protection measures, such as personal protective equipment**

**General information** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.

**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, when the product is heated, or risk of inhalation of oil mist, use suitable respiratory equipment with gas filter (type A2). Follow guidance on selection, use, care and maintenance in accordance with EN 529.

**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. Contaminated work clothing should not be allowed out of the workplace.

**Environmental exposure controls** Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

**Physical state** Solid.

**Form** Paste.

**Colour** Light yellow.

**Odour** Slight.

**Melting point/freezing point** Property has not been measured.

**Boiling point or initial boiling point and boiling range** Property has not been measured.

**Flammability** Will burn if involved in a fire.

**Upper/lower flammability or explosive limits**

**Explosive limit - lower ( %)** Property has not been measured.

| | |
|---|---|
| **Explosive limit – upper (%)** | Property has not been measured. |
| **Flash point** | Property has not been measured. |
| **Auto-ignition temperature** | Not applicable, material is a solid. |
| **Decomposition temperature** | Not applicable as the product is not unstable. |
| **pH** | Material is non soluble in water. |
| **Kinematic viscosity** | Not applicable, material is a solid. |
| **Solubility** | |
| **Solubility (water)** | Insoluble in water. |
| **Partition coefficient (n-octanol/water) (log value)** | Not applicable, product is a mixture. |
| **Vapour pressure** | Not applicable, material is a solid. |
| **Density and/or relative density** | |
| **Density** | Property has not been measured. |
| **Relative density** | Property has not been measured. |
| **Vapour density** | Not applicable, material is a solid. |
| **Particle characteristics** | Property has not been measured. |
| **9.2. Other information** | |
| **9.2.1. Information with regard to physical hazard classes** | No relevant additional information available. |
| **9.2.2. Other safety characteristics** | |
| **Evaporation rate** | Not applicable, material is a solid. |
| **Viscosity** | Not applicable, material is a solid. |

## SECTION 10: Stability and reactivity

| | |
|---|---|
| **10.1. Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **10.2. Chemical stability** | Material is stable under normal conditions. |
| **10.3. Possibility of hazardous reactions** | Will not occur. |
| **10.4. Conditions to avoid** | Contact with incompatible materials. Heat, sparks, flames, elevated temperatures. |
| **10.5. Incompatible materials** | Strong oxidising agents. |
| **10.6. Hazardous decomposition products** | No hazardous decomposition products are known. |

## 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 an allergic skin reaction. |
| **Eye contact** | Direct contact with eyes may cause temporary irritation. |
| **Ingestion** | Expected to be a low ingestion hazard. |
| **Symptoms** | May cause an allergic skin reaction. Dermatitis. Rash. |

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

| | |
|---|---|
| **Acute toxicity** | The harmful effects may increase when exposed to used grease. |

| **Components** | **Species** | **Test Results** |
|---|---|---|
| N-1-naphthylaniline (CAS 90-30-2) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 1625 mg/kg |

| | |
|---|---|
| **Skin corrosion/irritation** | Due to lack of data the classification is not possible. |
| **Serious eye damage/eye irritation** | Due to lack of data the classification is not possible. |
| **Respiratory sensitisation** | Due to lack of data the classification is not possible. |
| **Skin sensitisation** | May cause an allergic skin reaction. |

| | |
|---|---|
| **Germ cell mutagenicity** | Suspected of causing genetic defects. |
| **Carcinogenicity** | Due to lack of data the classification is not possible. |

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | 3 Not classifiable as to carcinogenicity to humans. |

| | |
|---|---|
| **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 physical form of the product it is not expected to be an aspiration hazard. |
| **Mixture versus substance information** | No information available. |

**11.2. Information on other hazards**

| | |
|---|---|
| **Endocrine disrupting properties** | The mixture contains substance(s) considered to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. |
| **Other information** | None known. |

## 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** | None known. |

**Partition coefficient n-octanol/water (log Kow)**

| | |
|---|---|
| 2,6-di-tert-butyl-p-cresol (CAS 128-37-0) | 5,1 |
| N-1-naphthylaniline (CAS 90-30-2) | 4,2 |

| | |
|---|---|
| **Bioconcentration factor (BCF)** | Not available. |
| **12.4. Mobility in soil** | The product is insoluble in water and will spread on the water surface. |
| **12.5. Results of PBT and vPvB assessment** | This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. |
| **12.6. Endocrine disrupting properties** | This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight. |
| **12.7. Other adverse effects** | Greases are generally hazardous to the environment. |

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

| | |
|---|---|
| **Residual waste** | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| **Contaminated 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. |
| **EU waste code** | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 20 01 26* |
| **Disposal methods/information** | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Special precautions** | Dispose in accordance with all applicable regulations. |

## SECTION 14: Transport information

**ADR**

| | |
|---|---|
| **14.1. UN number** | Not regulated as dangerous goods. |
| **14.2. UN proper shipping name** | Not regulated as dangerous goods. |

**14.3. Transport hazard class(es)**

| | |
|---|---|
| **Class** | Not assigned. |
| **Subsidiary risk** | - |
| **Hazard No. (ADR)** | Not assigned. |

| | |
|---|---|
| **Tunnel restriction code** | Not assigned. |
| **14.4. Packing group** | Not assigned. |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Not assigned. |

**RID**

| | |
|---|---|
| **14.1. UN number** | Not regulated as dangerous goods. |
| **14.2. UN proper shipping name** | Not regulated as dangerous goods. |
| **14.3. Transport hazard class(es)** | |
| **Class** | Not assigned. |
| **Subsidiary risk** | - |
| **14.4. Packing group** | Not assigned. |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Not assigned. |

**ADN**

| | |
|---|---|
| **14.1. UN number** | Not regulated as dangerous goods. |
| **14.2. UN proper shipping name** | Not regulated as dangerous goods. |
| **14.3. Transport hazard class(es)** | |
| **Class** | Not assigned. |
| **Subsidiary risk** | - |
| **14.4. Packing group** | Not assigned. |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Not assigned. |

**IATA**

| | |
|---|---|
| **14.1. UN number** | Not regulated as dangerous goods. |
| **14.2. UN proper shipping name** | Not regulated as dangerous goods. |
| **14.3. Transport hazard class(es)** | |
| **Class** | Not assigned. |
| **Subsidiary risk** | - |
| **14.4. Packing group** | Not assigned. |
| **14.5. Environmental hazards** | No. |
| **14.6. Special precautions for user** | Not assigned. |

**IMDG**

| | |
|---|---|
| **14.1. UN number** | Not regulated as dangerous goods. |
| **14.2. UN proper shipping name** | Not regulated as dangerous goods. |
| **14.3. Transport hazard class(es)** | |
| **Class** | Not assigned. |
| **Subsidiary risk** | - |
| **14.4. Packing group** | Not assigned. |
| **14.5. Environmental hazards** | |
| **Marine pollutant** | No. |
| **EmS** | Not assigned. |
| **14.6. Special precautions for user** | Not assigned. |

| | |
|---|---|
| **14.7. Maritime transport in bulk according to IMO instruments** | Not applicable. |

## 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 (EU) 2019/1021 On persistent organic pollutants (recast), 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.<br>This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. |
| **National regulations** | Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.<br>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**

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
CAS: Chemical Abstract Service.
Ceiling: Short Term Exposure Limit Ceiling value.
CEN: European Committee for Standardization.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
LD50: Lethal Dose, 50%.
MAC: Maximum Allowed Concentration.
MAK: Maximum Workplace Concentrations (“Maximale Arbeitsplatzkonzentrationen”).
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VME: Exposure Average Value.
vPvB: Very persistent and very bioaccumulative.

| | |
|---|---|
| **References** | ECHA: European Chemical Agency.<br>EPA: AQUIRE database<br>HSDB® - Hazardous Substances Data Bank<br>IARC Monographs. Overall Evaluation of Carcinogenicity |
| **Information on evaluation method leading to the classification of mixture** | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. |

| | |
|---|---|
| **Full text of any statements, which are not written out in full under sections 2 to 15** | H302 Harmful if swallowed.<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H341 Suspected of causing genetic defects.<br>H373 May cause damage to organs through prolonged or repeated exposure by ingestion.<br>H373 May cause damage to organs through prolonged or repeated exposure.<br>H400 Very toxic to aquatic life.<br>H410 Very toxic to aquatic life with long lasting effects.<br>H411 Toxic to aquatic life with long lasting effects. |
| **Training information** | Follow training instructions when handling this material. |
| **Issued by** | THK Co.,LTD<br>HEAD OFFICE: 2-12-10, Shibaura, Minato-ku, Tokyo 108-8506<br>Japan |
| **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. |