

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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

1.1 Product identifier

Product name: PBC

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

Identified uses: Lubricant

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS (UK) PLC.
New Century Street
ST1 5HU Hanley
Telephone: +44 (0) 1782 203700

Contact Person: Product Safety department
E-mail: product.safety@fuchs.com
Telephone: +44 (0) 1782 203700

1.4 Emergency telephone number: UK NHS: Dial 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation GB-CLP.

Classification according to GB-CLP.

Environmental Hazards

| | | |
|------------------------------------------|------------|-----------------------------------|
| Acute hazards to the aquatic environment | Category 1 | H400: Very toxic to aquatic life. |
|------------------------------------------|------------|-----------------------------------|

| | | |
|--------------------------------------------|------------|-------------------------------------------------------------|
| Chronic hazards to the aquatic environment | Category 1 | H410: Very toxic to aquatic life with long lasting effects. |
|--------------------------------------------|------------|-------------------------------------------------------------|

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Product name: PBC



Signal Words: Warning

Hazard Statement(s): H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P273: Avoid release to the environment.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards: The product may not be released into the environment without control. By handling of chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of the substances listed below with harmless additions.

| Chemical name | Identifier | Concentration * | UK-REACH Registration No. | Notes |
|--------------------------------------------|-------------------------|-----------------|---------------------------|-------|
| Copper flakes (coated with aliphatic acid) | INDEX No.: 029-019-01-X | 5,00% - <10,00% | | |

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

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

| Chemical name | Identifier | Classification |
|--------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copper flakes (coated with aliphatic acid) | INDEX No.: 029-019-01-X | GBCLP: Acute Tox. 3;H331, Acute Tox. 4;H302, Eye Irrit. 2;H319, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 10 |

GB-CLP

Acute Toxicity Estimate (ATE)

| Chemical name | Identifier | Exposure route | | |
|--------------------------------------------|-------------------------|----------------|--------|------------|
| | | oral | dermal | Inhalation |
| Copper flakes (coated with aliphatic acid) | INDEX No.: 029-019-01-X | 500 mg/kg | | |

Product name: PBC

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Nota L/ Nota N of Annex VI of Regulation GB-CLP.

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Supply fresh air; consult doctor in case of symptoms.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media: CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

Unsuitable extinguishing media: Water with a full water jet.

5.2 Special hazards arising from the substance or mixture: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire-fighting procedures: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Product name: PBC

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** In case of spills, beware of slippery floors and surfaces.
- 6.2 Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so.
- 6.3 Methods and material for containment and cleaning up:** Scrape up spillage or absorb with absorbing material. Stop the flow of material, if this is without risk. Dispose of the material collected according to regulations.
- 6.4 Reference to other sections:** See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Provide adequate ventilation. Observe good industrial hygiene practices. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.
- 7.2 Conditions for safe storage, including any incompatibilities:** Local regulations concerning handling and storage of waterpolluting products have to be followed.
- 7.3 Specific end use(s):** Not applicable
- Storage Class:** 11, Combustible solids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

| Chemical name | Type | Exposure Limit Values | Source |
|---------------------------------------------------------------------------------|------|-----------------------|-----------------------------------------------------------------|
| Copper flakes (coated with aliphatic acid) - Inhalable dusts and mists. - as Cu | TWA | 1 mg/m ³ | UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011) |
| Copper flakes (coated with aliphatic acid) - Inhalable dusts and mists. - as Cu | STEL | 2 mg/m ³ | UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011) |
| Copper flakes (coated with aliphatic acid) - Fume. | TWA | 0,2 mg/m ³ | UK. EH40 Workplace Exposure Limits (WELs), as amended (12 2011) |

8.2 Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. 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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Product name: PBC

Individual protection measures, such as personal protective equipment

| | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General information: | Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products. |
| Eye/face protection: | Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield. |
| Skin protection | |
| Hand Protection: | Avoid long-term and repeated skin contact. It is a good industrial hygiene practice to minimize skin contact. |
| Other: | Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing. |
| Respiratory Protection: | Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol. |
| Thermal hazards: | Not known. |
| 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 to remove contaminants. Discard contaminated footwear that cannot be cleaned. |
| Environmental Controls: | No data available. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|-------------------------------------|---------------------------------------------|
| Physical state: | solid |
| Form: | Paste |
| Color: | Pale yellow-orange |
| Odor: | No data available. |
| pH: | substance/mixture is non-soluble (in water) |
| Drop Point: | not determined |
| Boiling Point: | not determined |
| Flash Point: | Not applicable |
| Evaporation Rate: | Not applicable for mixtures |
| Flammability (solid, gas): | not determined |
| Explosion Limit - Upper (%): | Not applicable for mixtures |
| Explosion Limit - Lower (%): | Not applicable for mixtures |
| Vapor pressure: | Not applicable for mixtures |
| Relative vapor density: | Not applicable for mixtures |
| Density: | 0,90 - 1,11 g/cm ³ (20 °C) |
| Solubility(ies) | |

Product name: PBC

| | |
|-------------------------------------------------|---------------------------------------|
| Solubility in Water: | Insoluble in water |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | Not applicable for mixtures |
| Auto-ignition temperature: | not determined |
| Decomposition Temperature: | not determined |
| Flow time | Value not relevant for classification |
| Explosive properties: | Value not relevant for classification |
| Oxidizing properties: | Value not relevant for classification |
| Particle characteristics: | Study technically not feasible |
| 9.2 Other information | No data available. |

SECTION 10: Stability and reactivity

| | |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 10.1 Reactivity: | Stable under normal use conditions. |
| 10.2 Chemical Stability: | Stable under normal use conditions. |
| 10.3 Possibility of hazardous reactions: | Stable under normal use conditions. |
| 10.4 Conditions to avoid: | Stable under normal use conditions. |
| 10.5 Incompatible Materials: | Strong oxidizing substances. Strong acids. Strong bases. |
| 10.6 Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: ATEmix: 10.000 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: ATEmix: 10,2 mg/l

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are not met.

Product name: PBC

Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

Other adverse effects: No data available.

SECTION 12: Ecological information

General information: Not applicable Not applicable

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are met.

Chronic Toxicity

Product: Based on available data, the classification criteria are met.

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

12.3 Bioaccumulative potential

Product: Not applicable for mixtures

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

Product name: PBC

12.6 Other adverse effects: Very toxic to aquatic organisms. Toxic to aquatic life with long lasting effects.

Water Hazard Class (WGK): WGK 3: severely water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws. Do not allow to enter drains, sewers or watercourses.

SECTION 14: Transport information

ADR/RID

14.1 UN number or ID number: UN 3077
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Copper flakes (coated with aliphatic acid))
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
Hazard No. (ADR): 90
Tunnel restriction code: (-)
14.4 Packing Group: III
14.5 Environmental hazards: Dangerous for the environment
14.6 Special precautions for user: –

IMDG

14.1 UN number or ID number: UN 3077
14.2 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Copper flakes (coated with aliphatic acid))
14.3 Transport Hazard Class(es)
Class: 9
Label(s): 9
EmS No.: F-A, S-F
14.3 Packing Group: III
14.5 Environmental hazards: Marine pollutant
14.6 Special precautions for user: –

IATA

14.1 UN number or ID number: UN 3077
14.2 Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.(Copper flakes (coated with aliphatic acid))
14.3 Transport Hazard Class(es):
Class: 9
Label(s): 9MI
14.4 Packing Group: III
14.5 Environmental hazards: Dangerous for the environment
14.6 Special precautions for user: –

Product name: PBC

Amounts up to 5kg or 5 L are not regulated, (ADR/RID SP 375, IMDG 2.10.2.7, IATA SP A197)

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

GB Regulations

The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019:
none

The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020:
none

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

DIRECTIVE Control of Major Accident Hazards Regulations 2015:

| Hazard category in accordance with GB-CLP | Qualifying quantity for the application of Lower-tier requirements: | Qualifying quantity for the application of Upper-tier requirements: |
|----------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| E1: E1. Hazardous to the aquatic environment | 100 t | 200 t |

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

| | |
|------|-------------------------------------------------------|
| H302 | Harmful if swallowed. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Other information: The classification complies with the current GB lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: On the basis of test data; Calculation Method; Bridging Principle "Substantially similar mixtures"; Expert Judgement

Revision Date: 03.07.2024

Product name: PBC

Disclaimer:

The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.