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

1.1. Product identifier

Name of product PBC/D

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

Recommended intended purpose(s)
Lubricant

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor
FUCHS LUBRITECH GMBH
Werner-Heisenberg-Straße 1, D-67661 Kaiserslautern/Germany
Phone +49 (0) 6301 3206 - 0, Fax +49 (0) 6301 3206 - 940
E-Mail reach@fuchs-lubritech.de
Internet www.fuchs-lubritech.com

Advice
Product Safety Management
Phone +49 (0) 6301 3206 - 0
Fax +49 (0) 6301 3206 - 940
E-mail (competent person):
reach@fuchs-lubritech.de

1.4. Emergency telephone number

Emergency advice
+49 (0)171 / 4632154
Phone 06301/3206-808
This number is only available at office times.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

N; R51/53

R-phrases

51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Aquatic Acute 1	**H400**	
Aquatic Chronic 3	**H412**	

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

GHS09

Signal word
Warning

Hazard Statements

H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P273	Avoid release to the environment.

2.3. Other hazards

Information pertaining to special dangers for human and environment
Cold liquid may cause burns.

SECTION 3: Composition/ information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
7440-50-8	231-159-6	Copper	10	Xn;R22;N;R50/53

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
7440-50-8	231-159-6	Copper	10	Acute Tox.4, H302 / Aquatic Acute 1, H400 / Aqutic Chronic 2, H411 / M-Faktor Akut: 10

Additional advice
none at appropriate handling and storage

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
Remove contaminated soaked clothing immediately, don`t leave to dry.

In case of inhalation
Ensure of fresh air.
In the event of symptoms refer for medical treatment.

In case of skin contact
In case of contact with skin wash off immediately with soap and water.
Don't use organic solvents
Consult a doctor if skin irritation persists.

In case of eye contact
In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion
Refer to medical treatment.
Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed
Physician's information / possible symptoms
No symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment (Advice to doctor)
Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Alcohol-resistant foam
Dry powder
Carbon dioxide
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture
Fire gas of organic material has to be classed invariably as respiratory poison.

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Use breathing apparatus with independent air supply.

Additional information
Cool endangered containers with water spray jet.
Apply foam in large quantities because some of it is destroyed by the product.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Ensure adequate ventilation.
Avoid contact with skin and eyes
High risk of slipping due to leakage/spillage of product.

For emergency responders
no special dangers known

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Send in suitable containers for recovery or disposal.
Take up mechanically and send for disposal.

Additional Information
Informations for disposal see chapter 13.

6.4. Reference to other sections

Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8
Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.
Take the usual precautions when handling with chemicals.

General protective measures
Avoid contact with eyes and skin
Do not inhale aerosols

Hygiene measures
Follow general rules of industrial hygiene for safe handling of chemical products
Keep away from food and drink.
Keep away from tobacco.

Advice on protection against fire and explosion
The product is combustible.
Pay attention to general rules of internal fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Prevent penetration into the ground.

Advice on storage compatibility
Do not store with acids, alkalies or combustible materials.

Further information on storage conditions
Keep container tightly closed and store at cool and aired place.
Do not keep at temperatures above 35 °C
Protect from direct solar radiation.
Protect from heat and direct solar radiation.

Information on storage stability
See technical information about storage of lubricants

Storage group 11

Fire class B

7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Additional advice
This product as such does not contain any relevant ingredients with to be observed limited values

8.2. Exposure controls
Respiratory protection
Not required at determined application

Hand protection
As the product is a preparation of several substances, the actual resistance of the materials used for gloves cannot be scientifically calculated; it is therefore mandatory to check this before using the product.
The break through time depends on the mechanical stress imposed and must therefore be checked individually.
PVC gloves

Eye protection
safety goggles

Other protection measures
Usual working clothes for chemical industries

Appropriate engineering controls
Exhaust or ventilation at higher working temperatures

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colour	Odour
pasty	grey	characteristic

Odour threshold
not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value					not applicable
Boiling temperature / boiling range	not determined				
Melting point / Freezing point	not determined				
Flash point	> 220 °C				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 370 °C				
Self ignition temperature					not self-igniting
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density				DIN 51757	
Vapour density	not determined				

	Value	Temperature	at	Method	Remark
Solubility in water					more or less insoluble
Solubility/other					more or less insoluble
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				

Oxidising properties
No information available.

Explosive properties
The product as such is not explosive.

9.2. Other information
No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
No information available.

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
none at appropriate handling and storage

10.5. Incompatible materials
Materials to avoid
Reactions with acids.
Reactions with oxidising agents.
Reactions with alkalies.

10.6. Hazardous decomposition products
none at appropriate handling and storage

Thermal decomposition

Remark No decomposition below 350°C.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral				not determined
Irritability skin	no irritating effects known			
Irritability eye	no irritating effects known			
Skin sensitization	No sensitizing effect known			

Additional information
No toxical dates available.
The product was classified on the basis of the calculation procedure of the directive 67/548/EEC (conventional method).

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish				not determined

12.2. Persistence and degradability

Biological degradability not determined

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Behaviour in sewage plant

Product gets duly not into waste water before it is not treated according to the local regulations.

General regulation

Ecological dates are not available.
Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

Waste disposal in accordance with the relevant regulations.

Recommendations for packaging

metal container, for empty containers waste code 150104 "metal containers" applies

General information

Ultimately responsible for correct classification is the waste producer, as the EWC names different codes for different origins of same waste

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3077	3077	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper)	Environmentally hazardous substance, solid, n.o.s. (Copper)
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	III	III	III
14.5. Environmental hazards	No	No	No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

Land and inland navigation transport ADR/RID

Hazard label(s) 9
tunnel restriction code E
Classification code M7

Marine transport IMDG
MARINE POLLUTANT

SECTION 15: Regulatory information

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

National regulations

Water hazard class	1	Mixture-WGK according to VwVwS (GER)

15.2. Chemical Safety Assessment

Chemical Safety Assessments for mixtures is not required.

SECTION 16: Other information

Training advice
Use information in this MSDS

Recommended uses and restrictions
usage only according to instructions for use and observance of warning notes
National and local regulations concerning chemicals shall be observed.

Further information
Substantial changes to the former version are marked by "!" on the left margin of the paper.
All the raw materials in this product are listed in TSCA.
Refer to product information paper.
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions.
It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 2.0

Sources of key data used
Material Safety Data Sheets of raw materials

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 22 Harmful if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

-?-

H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.