

Printing date 02/25/2019

Reviewed on 02/25/2019

1 Identification

- **Product identifier**
- **Trade name:** CATERPILLAR HAMMER PASTE
- **Application of the substance / the mixture**
Grease
Only for proper handling.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BUCHER AG LANGENTHAL
MOTOREX-Schmiertechnik
Bern-Zürich-Strasse 31
CH-4901 Langenthal
Telefon +41 (0)62 919 75 75
- **Information department:** msds@motorex.com
- **Emergency telephone number:**
USA + Kanada: 1 800 424 9300 (Chemtrec Chemical Manufacturers Association, Arlington, VA 22209)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



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.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 0

- **HMS-ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7440-50-8	copper	≥2.5-≤7.5%
EINECS: 231-159-6	Acute Tox. 3, H301; Aquatic Acute 1, H400; Aquatic Chronic 2, H411	

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove residues with soap and water.
Remove contaminated clothing immediately.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Do not induce vomiting. Do not take in resorption stimulating agents.
Consult a physician who will decide on need and method of emptying the stomach.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

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- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· PAC-1:

<i>None of the ingredients is listed.</i>

· PAC-2:

<i>None of the ingredients is listed.</i>

· PAC-3:

<i>None of the ingredients is listed.</i>

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** *No special precautions are necessary if used correctly.*
- **Information about protection against explosions and fires:**
No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:**
Store containers closed and protect against rain, dust, heat and other atmospheric influences.
- **Storage class:** 12
- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**
No further data; see section 7.
 - **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
- | | |
|-------------------------|---|
| 7440-50-8 copper | |
| PEL | <i>Long-term value: 1* 0.1** mg/m³
as Cu *dusts and mists **fume</i> |
| REL | <i>Long-term value: 1* 0.1** mg/m³
as Cu *dusts and mists **fume</i> |
| TLV | <i>Long-term value: 1* 0.2** mg/m³
*dusts and mists; **fume; as Cu</i> |
- **Additional information:** *The lists that were valid during the creation were used as basis.*
 - **Exposure controls**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.

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- **Breathing equipment:**
Not necessary if room is well-ventilated.
Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.4 mm
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).
- **Eye protection:** Goggles recommended during refilling.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Pasty
Color:	Bronze
Odor:	Characteristic
Odor threshold:	Not determined.
- **pH-value:** Not determined.
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	317 °C (602.6 °F) (DIN EN ISO 3405)
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.
- **Vapor pressure:** Not determined.
- **Density at 20 °C (68 °F):** 0.9 g/cm³ (7.511 lbs/gal) (ASTM D 4052)
- **Relative density** Not determined.
- **Vapor density** Not determined.

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· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7440-50-8 copper

Oral	LD50	300-2,500 mg/kg (rat)
	NOAEL	1,000 ppm (mouse) 1,000 ppm (rat)
	LOAEL	2,000 ppm (mouse) 2,000 ppm (rat)
Dermal	LD50	2,000 mg/kg (rat)
Inhalative	LC50 / 4h	5.11 mg/l (rat)
	NOAEL	2 mg/m ³ (rat)
	LOEL	0.2 mg/m ³ (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**· **Aquatic toxicity:****7440-50-8 copper**

LC50	0.0028-9.15 mg/l/96h (fish)
LC50	0.0005-0.302 mg/l/48h (aquatic invertebrates)
	0.0059-0.0302 mg/l/48h (fish)
EC50	0.012-0.0238 mg/l/24h (aquatic invertebrates)
EC50	0.005-0.042 mg/l/96h (aquatic invertebrates)
	0.047 mg/l/96h (algae / cyanobacteria)
EC50	0.0165-0.987 mg/l/72h (algae / cyanobacteria)
EC50	0.001-1.213 mg/l/48h (aquatic invertebrates)
NOEC	0.4-1 g/kg/21d (terrestrial arthropods)
	0.0234-0.0449 g/kg/21d (sediment)
NOEC	0.0279-1 g/kg/28d (terrestrial arthropods)
	0.042 g/kg/28d (terrestrial plants)
	0.0183-0.5809 g/kg/28d (sediment)
NOEC	0.0122-0.0292 mg/l/96h (fish)
	3.818 mg/l/96h (microorganisms)
NOEC	3.563-3.8 mg/l/48h (microorganisms)

· **Persistence and degradability** No further relevant information available.· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Ecotoxicological effects:**· **Remark:**

Very toxic for fish

Harmful to fish

· **Additional ecological information:**· **General notes:**

Not hazardous for water.

Very toxic for aquatic organisms

Harmful to aquatic organisms

· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT · ADR/RID/ADN, IMDG, IATA 	<p style="margin: 0;">NA3077</p> <p style="margin: 0;">UN3077</p>
<ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR/RID/ADN · IMDG · IATA 	<p style="margin: 0;">Hazardous waste, solid, n.o.s.</p> <p style="margin: 0;">3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)</p> <p style="margin: 0;">ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper), MARINE POLLUTANT</p> <p style="margin: 0;">ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, IMDG, IATA <div style="display: flex; align-items: center; gap: 10px;">   </div>	<p style="margin: 0;">9 Miscellaneous dangerous substances and articles</p> <p style="margin: 0;">9</p>
<ul style="list-style-type: none"> · ADR/RID/ADN <div style="display: flex; align-items: center; gap: 10px;">   </div>	<p style="margin: 0;">9 (M7) Miscellaneous dangerous substances and articles</p> <p style="margin: 0;">9</p>
<ul style="list-style-type: none"> · Packing group · DOT, ADR/RID/ADN, IMDG, IATA 	<p style="margin: 0;">III</p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADR/RID/ADN): 	<p style="margin: 0;">Yes (DOT)</p> <p style="margin: 0;">Symbol (fish and tree)</p> <p style="margin: 0;">Symbol (fish and tree)</p>

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· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Remarks:	Special marking with the symbol (fish and tree).
· ADR/RID/ADN	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

None of the ingredients is listed.

· **TSCA new (21st Century Act): (Substances not listed)**

7440-50-8 | copper

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories
· EPA (Environmental Protection Agency)

7440-50-8 | copper

D

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements GHS label elements
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

· Department issuing SDS: Abteilung Produktsicherheit

· Date of preparation / last revision 02/25/2019 / 1.9

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.