



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/02/2019

Reviewed on 10/02/2019

1 Identification

- Product identifier For professional use only
- Trade name: Corroded Coppa Fine Powder
- CAS Number:
7440-50-8
- EC number:
231-159-6
- Application of the substance /the mixture Surface Coating
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
DAS64 Design Ltd., Flake King, Lartington, Barnard Castle, Co. Durham, DL12 9DW
Tel: +44 (0) 1833 650 353
- Information department: LABORATORY
- Emergency telephone number: +44(0)1833 650 353 (Business hours)

SECTION 2: Hazards identification

Classification of the substance or mixture

Flam. Sol. 2 H228 Flammable solid.

- Label elements
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms

GHS02



- Signal word Warning
- Hazard statements
Flammable solid.
- Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. –No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of fire: Use for extinction: CO2, powder or water spray.
- Classification system:
- NFPA ratings (scale 0–4)



Health = 2
Fire = 2
Reactivity = 0

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Trade name: copper

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- WHMIS-ratings (scale 0 –4)

HEALTH 2

Health = 2

FIRE 2

Fire = 2

REACTIVITY 0

Reactivity = 0

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

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
7440–50–8copper
- Identification number(s)
- EC number: 231–159–6

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- 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 Treat symptomatically.

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
Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Ensure adequate ventilation.
- Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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· Protective Action Criteria for Chemicals

· PAC-1:		
7440-50-8	copper	3 mg/m ³
· PAC-2:		
7440-50-8	copper	33 mg/m ³
· PAC-3:		
7440-50-8	copper	200 mg/m ³

7 Handling and storage

- Handling:
 - Precautions for safe handling
 - Information about protection against explosions and fires: Keep ignition sources away –Do not smoke.
- 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: Keep receptacle tightly sealed.
 - 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 item 7.
- Control parameters

· Components with limit values that require monitoring at the workplace:	
7440-50-8 copper	
PEL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu

- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
 - General protective and hygienic measures: Wash hands before breaks and at the end of work.
 - Breathing equipment:
 - If spraying this product, an ABEK respirator to EN141 and EN405 is normally sufficient. If in doubt, consult a respirator manufacturer and show this safety data sheet.
 - Protection of hands:
 - Not required.
 - 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
 - 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.

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- Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:
Not required.
Use suitable eye protection in accordance with EN 166, specified to protect against liquid splashes, spray mists or dusts as appropriate.

9 Physical and chemical properties

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

Form:	Solid
Color:	Not determined.
- Odor: Characteristic
- Odor threshold: Not determined.
- pH-value: Not applicable.
- Change in condition

Melting point/Melting range:	1,083 °C (1,981.4 °F)
Boiling point/Boiling range:	2,597 °C (4,706.6 °F)
- Flash point: Not applicable.
- Flammability (solid, gaseous): Product is not flammable.
- Decomposition temperature: Not determined.
- Auto igniting: Not determined.
- Danger of explosion: Not determined.
- Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
- Vapor pressure at 20 °C (68 °F): 0 hPa (0 mmHg)
- Density at 20 °C (68 °F): 8.96 g/cm³ (74.771 lbs/gal)
- Relative density: Not determined.
- Vapor density: Not applicable.
- Evaporation rate: Not applicable.
- Solubility in /Miscibility with Water: Not determined.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.
- Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.

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- 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:

Oral	LD50	>2,000 mg/kg(rat)
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- 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) Substance is not listed.
 - NTP (National Toxicology Program) Substance is not listed.
 - OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- 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.
- Additional ecological information:
 - General notes: Not hazardous for water.
 - Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

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

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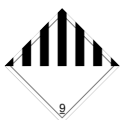


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14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, ADR, IMDG, IATA 	UN3089
<ul style="list-style-type: none"> · UN proper shipping name · DOT · ADR · IMDG · IATA 	Metal powders, flammable, n.o.s. 3089 METAL POWDER, FLAMMABLE, N.O.S., ENVIRONMENTALLY HAZARDOUS METAL POWDER, FLAMMABLE, N.O.S., MARINE POLLUTANT METAL POWDER, FLAMMABLE, N.O.S.
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, IMDG 	<div style="display: flex; align-items: center; gap: 10px;">   </div>
<ul style="list-style-type: none"> · Class · Label 	4.1 Flammable solids, self-reactive substances and solid desensitised explosives 9
<ul style="list-style-type: none"> · IATA 	<div style="display: flex; align-items: center; gap: 10px;">  </div>
<ul style="list-style-type: none"> · Label 	4.1 Flammable solids, self-reactive substances and solid desensitised explosives 9
<ul style="list-style-type: none"> · Packing group · Class · DOT, ADR, IMDG, IATA 	II
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking(ADR): 	Environmentally hazardous substance, solid; Marine Pollutant Yes (DOT) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category · Stowage Code 	Warning: Flammable solids, self-reactive substances and solid desensitised explosives 40 F-A, S-F A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: · DOT · Remarks: 	Special marking with the symbol (fish and tree).

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- ADR
- Excepted quantities (EQ)

Code: E1
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 1000 g

- UN " Model Regulation": UN 3089 METAL POWDER, FLAMMABLE, N.O.S., 9, II, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- Section 355 (extremely hazardous substances): Substance is not listed.

- TSCA (Toxic Substances Control Act):

7440-50-8 copper

ACTIVE

- Hazardous Air Pollutants Substance is not listed.
- Proposition 65
- Chemicals known to cause cancer: Substance is not listed.
- Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- Chemicals known to cause developmental toxicity: Substance is not listed.

- Cancerogenity categories

- EPA (Environmental Protection Agency)

7440-50-8 copper

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- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- MAK (German Maximum Workplace Concentration) Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms



GHS02

- Signal word Warning
- Hazard statements
Flammable solid.
- Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of fire: Use for extinction: CO2, powder or water spray.

- National regulations:

- Technical instructions (air):

Class	Share in %
III	100.0

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- Water hazard class: Generally not hazardous for water.
- 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.

- Department issuing SDS: Product safety department: LABORATORY
- Date of preparation /last revision 10/02/2019/-
- 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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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

Flam. Sol. 2: Flammable solids - Category 2

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