

1. Identification of the substance/mixture and of the company/undertaking	
Product:	Wire product made of a copper-zinc alloy with a copper-zinc-coating
Trade name:	topas [®] plus H, topas [®] plus S
Application:	Semi-finished product
Details of the supplier	
Berkenhoff GmbH	
Berkenhoffstrasse 14	
D-35452 Heuchelheim	
Phone:	+ 49 (0)641 601-0
Fax:	+ 49 (0)641 601-222
Emergency phone	+ 49 (0)641 601-0
Email :	info@bedra.com
2. Hazards identification	
Classification of the substance or mixture:	The substance is not classified according to the Globally Harmonized System (GHS).
Classification according to Directive 67/548/EEC or Directive 1999/45/EC:	Not applicable
Information concerning particular hazards for human and environment:	Not applicable
Label elements	
Label elements acc.	
Regulation (EC) No 1272/2008:	Not applicable
Hazard pictograms:	Not applicable
Signal word:	Not applicable
Hazard statements:	Not applicable
Other hazards Result of PBT and vPvB assessment	
PBT:	Not applicable
VPvB:	Not applicable
3. Composition / information on ingredients	
Chemical characterization	Metal in compact form
Base Material:	Copper (CAS: 7440-50-8 / EINECS: 231-159-6) 64 % Zink (CAS: 7440-66-6 / EINECS: 231-175-3) 36 %
Coating :	Copper (CAS: 7440-50-8 / EINECS: 231-159-6) 65 % Zink (CAS: 7440-66-6 / EINECS: 231-175-3) 35 %
4. First aid measures	
Description of first aid measures	
General information:	No special measures required
After inhalation:	Seek medical treatment in case of complaints
After skin contact:	The product does not irritate the skin
After eye contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing:	Seek medical treatment.
5. Fire fighting measures	
Extinguishing media	
Suitable extinguishing agents:	Product is not flammable. Use fire fighting measures that suit the surrounding fire.
Advice for firefighters	
Protective equipment:	No special measures required.
6. Accidental release measures	
Person precautions, protective equipment and emergency procedures:	Not required.
Environmental precautions:	Do not allow material to be released to the environment without proper governmental permits.
Methods and material for containment and cleaning up:	Pick up mechanically.
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 information on disposal.
7. Handling and storage	
Handling:	
Precautions for safe handling:	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.
Information about protection against explosions and fires:	The product is not flammable.
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:	None.

8. Exposure controls and 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:

General dust limit (A – alveolar fraction, E – respirable fraction)
AGW (Germany) 1,25A, 10E [mg/m³]

Additional information:

No data

Exposure controls

Personal protective equipment

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Not required.

Protections of hands:

Not required.

Eye protection:

Safety glasses.

Body protection:

Protective work clothing

When using the product for welding or soldering the appropriate health and safety regulations are observed.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information:

Appearance:

Form:

Wire

Color:

grey-gold

Odor:

Odorless

Odour threshold:

Not determined

pH-value:

Not applicable

Change in condition

Melting point / Melting range:

Not determined

Boiling point / Boiling range:

Not determined

Sublimation temperature / start:

Not determined

Flash point:

Not applicable

Flammability (solid, gaseous)

Product is not flammable

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

Auto igniting:

Not determined

Danger of explosion:

Product does not present an explosion hazard.

Explosion limits:

Lower:

Not determined

Upper:

Not determined

Vapor pressure:

Not applicable

Density:

8,4 g/cm³

Relative density

Not determined

Vapor density

Not applicable

Evaporation

Not applicable

Solubility in / Miscibility with Water:

Insoluble

10. Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition /

Conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions:

No dangerous reactions known.

Incompatible materials:

Acids, Alkalis, Mercury, Ammonia, Chlorine gas

Hazardous decomposition products:

Metal oxide fume

11. Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin:

Generally the product does not irritate the skin.

On the eye:

No irritant effect.

Sensitization:

No sensitizing effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12. Ecological information

Toxicity

Aquatic toxicity:

No further relevant information available.

Persistence and degradability:

No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential:

No further relevant information available.

Mobility in soil:

No further relevant information available.

Additional ecological information

General notes:

Do not allow material to be released to the environment without proper governmental permits.

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: Consult state, local or national regulations for proper disposal.
Hand over to disposers of hazardous waste.
Must be specially treated under to official regulations.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14. Transport information

Not a hazardous material for transportation.

Land transport ADR/RID (cross-border/domestic)

ADR/RID—GGVE/E class: None

Maritime transport IMDG/GGVSea:

IMDG/GGVSea class: None

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA class: None

Special precautions for user : Not applicable

Transport/Additional information: Not dangerous according to the above specifications.

Transport in bulk according to Annex II

of MARPOL73/78 and the IBC Code: Not applicable

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008: The product is classified according to EC legislation, but need not be marked. (Metal in compact form)

Hazard Pictograms: Not applicable

Signal word: Not applicable

Hazard statements: Not applicable

National regulations

Information about limitation of use: For use only by technically qualified individuals.

Water hazard class: Generally not hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Material Safety Data Sheet or in combination with any other product or process is the responsibility of the user.

Department issuing data specification sheet: Quality and Environmental Department.

Contact: Dr. Knut Hawerkamp
Head of Quality Management

Abbreviations and acronyms:

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

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).

IMDG: International Maritime Code for Dangerous Goods.

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organisation.

ICAO –TI : Technical Instructions by the "International Civil Aviation Organization" (IACO).

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

HMIS: Hazardous Materials Identification System (USA).