

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

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

1.1 Product identifier

Trade name: **CP 105, B-Cu92Ag-645/825, Cu-Rophos 2**UFI: *not applicable.*

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

*No further relevant information available.***Application of the substance / the mixture** *Hard solder*

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:*Felder GmbH**Im Lipperfeld 11**D-46047 Oberhausen**Tel.: +49 (0)208/ 85035-0**Fax.: +49 (0)208/ 26080**http://www.felder.de**e-mail: info@felder.de***Further information obtainable from:***lab**(mo-thu. 8:00 a.m. - 4:00 p.m./ fr. 8:00 a.m. - 1:00 p.m.)**email: mprobst@felder.de***1.4 Emergency telephone number:** *Not necessary, due to the fact that the product does not need to be labelled.***EuPCS:** *PC-TEC-24*

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008*The product is not classified, according to the CLP regulation.*

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void*

2.3 Other hazards

Results of PBT and vPvB assessment**PBT:** *Not applicable.***vPvB:** *Not applicable.*

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: *Mixture: consisting of the following components.*

Dangerous components:

CAS: 7440-50-8 EINECS: 231-159-6 Index number: 029-024-00-X Reg.nr.: 01-2119480154-42	copper	Aquatic Chronic 2, H411	90.8-92.6%
CAS: 7440-22-4 EINECS: 231-131-3 Reg.nr.: 01-2119555669-21	silver	substance with a Community workplace exposure limit	1.5-2.5%

further ingredients:

*phosphorus**Reg.nr.: 01-2119448009-39***Additional information:** *For the wording of the listed hazard phrases refer to section 16.*

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: *Take affected persons out into the fresh air.***After inhalation:** *Supply fresh air; consult doctor in case of complaints.*

(Contd. on page 2)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

Trade name: CP 105, B-Cu92Ag-645/825, Cu-Rophos 2

(Contd. of page 1)

After skin contact:*After contact with the molten product, cool rapidly with cold water.**Do not pull solidified product off the skin.**Seek medical treatment.***After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.***After swallowing:** *If symptoms persist consult doctor.***4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.***4.3 Indication of any immediate medical attention and special treatment needed***No further relevant information available.***SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:** *CO₂, sand, extinguishing powder. Do not use water.***For safety reasons unsuitable extinguishing agents:** *Water***5.2 Special hazards arising from the substance or mixture** *No further relevant information available.***5.3 Advice for firefighters****Protective equipment:** *Do not inhale explosion gases or combustion gases.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.***6.3 Methods and material for containment and cleaning up:** *Allow to solidify. Pick up mechanically.***6.4 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.***SECTION 7: Handling and storage****7.1 Precautions for safe handling***Extractors are required on all machines used for thermal processing or splinter removal processes.***Information about fire - and explosion protection:** *No special measures required.***7.2 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:** *Store away from foodstuffs.***Further information about storage conditions:** *Store in dry conditions.***Storage class:** 13**7.3 Specific end use(s)** *No further relevant information available.***SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****7440-50-8 copper**

MAK (Germany)	Long-term value: 0.01 A mg/m ³ als Cu
WEL (Great Britain)	Short-term value: 2** mg/m ³ Long-term value: 0.2* 1** mg/m ³ *fume **dusts and mists (as Cu)
OEL (Ireland)	Long-term value: 0.2* 1** mg/m ³ *fume **dusts and mists

7440-22-4 silver

IOELV (EU)	Long-term value: 0.1 mg/m ³
AGW (Germany)	Long-term value: 0.1 E mg/m ³ 8(II);DFG, EU
WEL (Great Britain)	Long-term value: 0.1 mg/m ³
OEL (Ireland)	Long-term value: 0.1 mg/m ³ IOELV

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

Trade name: CP 105, B-Cu92Ag-645/825, Cu-Rophos 2

(Contd. of page 2)

Regulatory information

MAK (Germany): MAK- und BAT-Liste

WEL (Great Britain): EH40/2020

OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work

AGW (Germany): TRGS 900

IOELV (EU): (EU) 2019/1831

recommended monitoring procedures in accordance with 2020/878/EU no. 8.1.2:

7440-50-8 copper: BIA 7755 (D), NIOSH 7301(E), MétroPol Fiche 003(F), MTA/MA-025/A92(ESP)

7440-22-4 silver: ISO 15202(F, E), BIA 8600(D), NIOSH 7301(E)

Additional information: The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see item 7.**Appropriate engineering controls:**

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

Individual protection measures, such as personal protective equipment**General protective and hygienic measures:** Avoid skin contact with the liquefied material.**Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves Leather gloves.**Penetration time of glove material** Value for the permeation: Level $\leq$ -**Eye/face protection** Safety glasses**Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Colour:** Copper coloured**Odour:** Odourless**Odour threshold:** Not determined.**Melting point/freezing point:** 645-825 °C**Boiling point or initial boiling point and boiling range** Undetermined.**Flammability** Not determined.**Lower and upper explosion limit****Lower:** Not determined.**Upper:** Not determined.**Flash point:** Not applicable.**Decomposition temperature:** Not determined.**pH** Not applicable.**Viscosity:****Kinematic viscosity** Not applicable.**Dynamic:** Not applicable.**Solubility****water:** Insoluble.**Partition coefficient n-octanol/water (log value)** Not determined.**Vapour pressure:** Not applicable.**Density and/or relative density****Density at 20 °C:** 8.1 g/cm³**Relative density** Not determined.**Vapour density** Not applicable.**Particle characteristics** See item 3.**9.2 Other information****Appearance:****Form:** Solid**Important information on protection of health and environment, and on safety.****Auto-ignition temperature:** Product is not selfigniting.**Explosive properties:** Product does not present an explosion hazard.**Solvent content:****Organic solvents:** 0.0 %

(Contd. on page 4)

EU

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

Trade name: CP 105, B-Cu92Ag-645/825, Cu-Rophos 2

(Contd. of page 3)

VOC (EC) 0.00 %

Change in condition

Evaporation rate Not applicable.

Information with regard to physical hazard classes

Explosives Void

Flammable gases Void

Aerosols Void

Oxidising gases Void

Gases under pressure Void

Flammable liquids Void

Flammable solids Void

Self-reactive substances and mixtures Void

Pyrophoric liquids Void

Pyrophoric solids Void

Self-heating substances and mixtures Void

Substances and mixtures, which emit flammable

gases in contact with water Void

Oxidising liquids Void

Oxidising solids Void

Organic peroxides Void

Corrosive to metals Void

Desensitised explosives Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions Reacts with strong acids and oxidising agents.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

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

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

Trade name: CP 105, B-Cu92Ag-645/825, Cu-Rophos 2

(Contd. of page 4)

12.7 Other adverse effects**Additional ecological information:****General notes:**

The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation** Contact manufacturer for recycling information.**European waste catalogue**

17 04 07: mixed metals

Sales packaging / inner film:

15 01 02: plastic packaging

overpack:

15 01 01: paper and cardboard packaging

Uncleaned packaging: void.**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**

ADR, ADN, IMDG, IATA

Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA

Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

Void

14.4 Packing group

ADR, IMDG, IATA

Void

14.5 Environmental hazards:**Marine pollutant:**

No

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

UN "Model Regulation":

Void

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EU) 2019/1021 on persistent organic pollutants (POP) None of the ingredients are listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

(Contd. on page 6)

EU —

Safety data sheet

according to 1907/2006/EC, Article 31 and 2020/878/EU

Printing date 23.02.2023

Version number 7 (replaces version 6)

Revision: 14.09.2022

Trade name: CP 105, B-Cu92Ag-645/825, Cu-Rophos 2

(Contd. of page 5)

National regulations:**Information about limitation of use:** *Employment restrictions concerning juveniles must be observed.***Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.***SECTION 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.***Reasons for changes:**

26.10.2015: chapter 1, 8, 15 adaption to Regulation 453/2010/EG and 830/2015/EU

22.02.2017: chapter 8.1

27.08.2018: chapter 13, 3

29.10.2020: chapter 1

04.02.2021: chapter 1, 3, 15, 16

14.09.2022: chapter 15

Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:**Relevant phrases***H411 Toxic to aquatic life with long lasting effects.***Contact:** *Dr. M. Probst***Version number of previous version:** 6**Abbreviations and acronyms:***RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**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)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2***Safety data sheet SD2026**