

SAFETY DATA SHEET

According to Regulation (EU) 2020/878, amending Annex II of Regulation (EC) No 1907/2006 (REACH)

BROPOLS C.S. PASTA

Printing date: 20/09/2024

Version: 3

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

1.1. Product identifier

Trade name	: BROPOLS C.S. PASTA
Description	: Silver Brazing Flux in Paste Form.
UFI	: GV60-D0HJ-H00S-RGXR.

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

Identified uses	: All-purpose deoxidizing flux in paste form for brazing with silver alloy rods with a melting point up to 850°C. Its active temperature range is from 550 to 850°C.
Uses advised against	: Do not use for other purposes other than those described in the product.

1.3. Details of the supplier of the safety data sheet

Supplier	: BROQUETAS, S.L.
Address	: c/ Can Sallarès 12-16 08740 Sant Andreu de la Barca, Barcelona (Spain)
Telephone number	: +34 936401900
E-mail address for a competent person responsible for the SDS	: broquetas@broquetas.com




1.4. Emergency telephone number	: +34 915620420. Instituto Nacional de Toxicología y Ciencias Forenses.
Availability	: 24h.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 [CLP]	
Hazard Classes/Categories	Hazard Statements (H)
Skin corrosion/irritation, 1A	H314 Causes severe skin burns and eye damage
Acute toxicity, Oral, 3	H301 Toxic if swallowed
Reproductive toxicity, 1B	H360FD May damage fertility. May damage the unborn child

2.2. Label elements

Regulation (EC) No 1272/2008 [CLP]		
Signal Word and Pictograms	Hazard Statements (H)	Precautionary Statements (P)*
<p>Danger</p>    <p>GHS05 GHS06 GHS08</p>	<p>H314 Causes severe skin burns and eye damage. H301 Toxic if swallowed. H360FD May damage fertility. May damage the unborn child.</p>	<p>P201, P202, P260, P264, P270, P280, P301+P310, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P308+P313, P310, P321, P330, P363, P405, P501</p>

*Full text of the Precautionary Statements (P): See Section 16.

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

The product is classified and labelled according to the CLP regulation.



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2.3. Other hazards

Compliance with PBT/vPvB criteria : The product does not contain substances classified as PBT or vPvB.

Other hazards not identified in the classification : The vapours emitted during the heating phases can irritate the respiratory tract.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	Content (%)	CAS number	CE number	Classification according to Regulation (EC) No 1272/2008 (CLP)
Potassium hydroxide	10 – 20	1310-58-3	215-181-3	Acute Tox. 4 (Oral), DL50 Oral = 333 mg/kg, H302 Eye Irrit. 2, H319: 0,5 % ≤ C < 2 % Skin Corr. 1A, H314: C ≥ 5 % Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Irrit. 2, H315: 0,5 % ≤ C < 2 %
Potassium hydrogenfluoride	30 – 40	7789-29-9	232-156-2	Acute Tox. 3 (Oral), Oral LD50 not available. Converted acute toxicity point estimate = 100 mg/kg, H301 Skin Corr. 1B, H314: C ≥ 1 % Eye Irrit. 2, H319: 0,1 % ≤ C < 1 % Skin Irrit. 2, H315: 0,1 % ≤ C < 1 %
Boric acid	40 – 60	10043-35-3	233-139-2	Repr. 1B, H360FD: C ≥ 5,5 %

The product contains no known nanomaterials.

SECTION 4: First aid measures

4.1. Description of first aid measures

General notes : If a health problem is detected, seek medical advice.

In case of inhalation : Remove victim to fresh air and seek medical advice.

In case of contact with skin : Immediately take off contaminated clothing. Wash skin thoroughly with mild soap and water. Consult a doctor if symptoms persist.

In case of contact with eyes : Immediately rinse the eyes cautiously with water for several minutes holding the eyelids open for a good cleaning. Consult an ophthalmologist immediately.

In case of ingestion : Immediately call a POISON CENTER/doctor. Rinse mouth with water. Do not induce vomiting.

Recommendations for first aid responders : Wear suitable protective clothing.

4.2. Most important symptoms and effects, both acute and delayed : The product should only be used in well-ventilated areas. See section 11.

4.3. Indication of any immediate medical attention and special treatment needed : Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide, polyvalent powder, foam or water spray.

Unsuitable extinguishing media : Do not use high pressure water jet to avoid dispersion of the product.

5.2. Special Hazards arising from the substance or mixture



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Hazardous combustion products	: Alkaline oxides.
Other specific hazards	: Smoke released by the combustion of the product may cause damage in the airways.
5.3. Advice for firefighters	: In case of fire, use personal protective equipment as required. Firefighters must wear fire resistant protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	: Avoid contact with skin, eyes and clothing. Follow the indications described in section 8.
For emergency responders	: Avoid contact with skin, eyes and clothing. Follow the indications described in section 8. Evacuate the area.
6.2. Environmental precautions	: Do not discard the product into public sewers, water systems or surface waters. If the product is spilled into a watercourse, sewage network or has contaminated the soil or vegetation, notify the competent authority.
6.3. Methods and material for containment and cleaning up	Absorb spillage to prevent material damage. Collect the product mechanically and put it in closed recipients and properly labelled. To completely remove, clean the surface with water. Manage the wastes through an authorised waste management entity.
6.4. Reference to other sections	: For more information, see sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Prevention and protection measures	: Handle the product carefully. Avoid contact with product. Follow the indications described in section 8. Handle in well-ventilated environments or in the presence of localized ventilation.
Advice on general occupational hygiene	: Do not eat, drink or smoke while handling the product. Keep proper hygiene after handling.
7.2. Conditions for safe storage, including any compatibilities	
Technical measures and storage conditions	: Keep the product in a cool, dry and well-ventilated place. Avoid temperatures above the melting point (550-850°C).
Containers requirements and storage areas	: Keep only in original packaging, always tightly closed. Incompatible materials: glass, enamel and strong acids. See also section 10.
7.3. Specific end use (s)	: Product for welding works.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
National occupational exposure limit values	: <u>Potassium hydroxide (CAS 1310-58-3):</u> TLV-C (ACGIH TLV, 8-hour TWA): 2 mg/m ³ . <u>Boric acid (CAS 10043-35-3):</u> TLV-TWA (ACGIH TLV, 8-hour TWA): 2 mg/m ³ (inhalable particulate matter).
DNELs and PNECs	: <u>Potassium hydroxide CAS 1310-58-3:</u> DNEL inhalation: 1 mg/m ³ (local, long-term). PNEC: -. <u>Potassium hydrogenfluoride (CAS 7789-29-9):</u>

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DNEL inhalation: 3,1 mg/m³ (systemic, long-term), 5,1 mg/m³ (local, short-term).
PNEC aqua, freshwater: 0,9 mg/L.
PNEC STP: 51 mg/L.
PNEC sediment, freshwater: 3,52 mg/kg sediment dw.
PNEC soil: 11 mg/kg soil dw.

Boric acid (CAS 10043-35-3):

DNEL oral: 8,3 mg/m³ (systemic, long-term).
DNEL dermal: 392 mg/kg bw/day (systemic, long-term).
PNEC aqua, freshwater: 2,9 mg/L.
PNEC aqua, marine water: 2,9 mg/L.
PNEC STP: 10 mg/L.
PNEC soil: 5,7 mg/kg soil dw.

8.2. Exposure controls

Appropriate engineering controls	: Handle in well-ventilated environments or in the presence of localized ventilation.
Individual protection measures, such as personal protective equipment	
Eye/face protection	: Use safety glasses or protective visors (EN 166).
Skin protection	
Hand protection	: Use resistance gloves for tiny molten metal splashes (EN 374). Gloves material: PVC, neoprene, rubber. The individual limit duration and the duration of the exposure must be considered by the company.
Others	: Use appropriate protective clothing.
Respiratory protection	: In work situation and under possible exposure, use masks or semi masks adapted for dust and smoke (EN 149, EN 371).
Environmental exposure controls	: The localized ventilation system must be composed of adequate equipment to reduce the pollutants before the emission into the atmosphere according to national and local regulations. Wastewater containing the product and waste must be collected and not poured into sewers or watercourses. Consider the usual precautions to protect the environment, see section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: White paste.
Odour	: Odourless.
Odour threshold	: Not applicable.
pH	: Not applicable.
Melting point/freezing point	: 550-850°C.
Initial boiling point and boiling range	: Not applicable.
Flash point	: Non-flammable.
Evaporation rate	: Not applicable.
Flammability (solid, gas)	: Non-flammable.
Upper/lower flammability or explosive limits	: Not applicable.



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Vapour pressure	: Not applicable.
Vapour density	: Not applicable.
Relative density	: Not available.
Solubility(ies)	: Water-soluble.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.
Viscosity	: Not applicable.
Explosive properties	: No.
Oxidising properties	: No.
9.2. Other information	: No additional information.

SECTION 10: Stability and reactivity

10.1. Reactivity	: See section 10.3.
10.2. Chemical stability	: Stable under normal conditions. It decomposes above the melting point and alkaline fumes are released.
10.3. Hazardous reactions	: In contact with strong acids reacts strongly exothermically and toxic gases are released.
10.4. Conditions to avoid	: Avoid temperatures above the melting point.
10.5. Materials to avoid	: Strong acids.
10.6. Hazardous decomposition products	: In case of fire, alkaline vapours from decomposition are released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects	
Hazard/Effect class	
Acute toxicity	: Acute toxicity, Oral, 3. H301 Toxic if swallowed. ATEmix (Oral) = 217 mg/kg.
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: On the basis of the available data, the classification criteria is not complied.
Germ cell mutagenicity	: On the basis of the available data, the classification criteria is not complied.
Carcinogenicity	: On the basis of the available data, the classification criteria is not complied.
Reproductive toxicity	: May damage fertility. May damage the unborn child.
STOT-single exposure	: On the basis of the available data, the classification criteria is not complied.
STOT-repeated exposure	: On the basis of the available data, the classification criteria is not complied.
Aspiration hazards	: On the basis of the available data, the classification criteria is not complied.



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Symptoms

: Nausea, vomiting, diarrhea, abdominal cramps, erythematous lesions of the skin and mucous membranes. Other symptoms include circulatory collapse, tachycardia, cyanosis, delirium, seizures and coma.

Chronic effects

: No data available.

11.2. Information on other hazards

Endocrine disrupting properties

: Contains no known endocrine disruptor.

SECTION 12: Ecological information

12.1. Toxicity information

: No data available.

12.2. Persistence and degradability

: No data available.

12.3. Bioaccumulative potential

: No data available.

12.4. Mobility in soil

: No data available.

12.5. Results PBT and vPvB assessment

: The product does not contain any substance classified as PBT or vPvB.

12.6. Endocrine disrupting properties

: It contains no known endocrine disruptor.

12.7. Other side effects

: No other side effects are known. Adopt good work practices and avoid dispersing the product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

: Product waste must be transported to an authorized waste disposal plant. Dispose according to local and national regulations. Do not remove by direct discharge into rivers or sewage system.

Packaging disposal:

: Handle contaminated containers as the product itself.

SECTION 14: Transport information

	ADR/RID	AND/ADNR	IMDG	IATA
14.1. UN number	3290	3290	3290	3290
14.2. UN proper shipping name	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (potassium hydroxide, potassium hydrogenfluoride), MIXTURE	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (potassium hydroxide, potassium hydrogenfluoride), MIXTURE	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (potassium hydroxide, potassium hydrogenfluoride), MIXTURE	TOXIC SOLID, CORROSIVE, INORGANIC, N.O.S. (potassium hydroxide, potassium hydrogenfluoride), MIXTURE
14.3. Transport hazard class(es)	6.1 (8)	6.1 (8)	6.1 (8)	6.1 (8)
14.4. Packing group	II	II	II	II
14.5. Environmental hazards	No	No	No	No
14.6. Special precautions for user	Read the safety data sheet before handling the product	Read the safety data sheet before handling the product	Read the safety data sheet before handling the product	Read the safety data sheet before handling the product
Special provisions	274	274	274	274

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SECTION 15: Regulatory information

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

EU regulations

REACH authorizations

: The mixture does not contain substances requiring authorization before they are used (Annex XIV of REACH). The mixture contains boric acid, substance of very high concern (SVHC) and included in the candidate list for authorization.

REACH use restrictions

: The product contains boric acid, which is a substance that presents a restriction of use in the entry No 30 of Annex XVII of REACH (substances classified as reproductive toxicant category 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008).

15.2. Chemical safety assessment

: The supplier has not carried out a chemical safety assessment for the mixture.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

: Not applicable.

SECTION 16: Other information

Changes to the previous version

: The format of the SDS has been adapted to the requirements of Regulation (EU) 2020/878, amending Annex II of REACH Regulation (EC) No 1907/2006. Full review of SDS. Changes in sections 1, 2, 3 and 16. This SDS replaces version 2.

Abbreviations and acronyms

: SDS: Safety data sheet.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very persistent and very bioaccumulative.
DNEL: Derived non-effect level.
PNEC: Predicted non-effect concentration.
SVHC: Substances of Very High Concern.
LD50: Median lethal dose.
STOT: Specific target organ toxicity.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation concerning the International Carriage of Dangerous Goods by Rail.
IMDG: International Maritime Dangerous Goods Code.
IATA: International Air Transport Association.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
ATEmix: Acute toxicity estimated of the mixture.

Key literature references and sources for data

: Safety data sheet of the components of the mixture.
<https://echa.europa.eu/>

Methods used for the purpose of mixture classification according to Regulation 1272/2008 (CLP)

: Calculation based on the classification of substances in the mixture.

Full text of hazard statements (H)

: H314 Causes severe skin burns and eye damage.
H301 Toxic if swallowed.
H360FD May damage fertility. May damage the unborn child.

Full text of precautionary statements (P)

: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.



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P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Advice on any training appropriate for workers

: Plant maintenance and production personnel must receive information and training on plant and equipment safety instructions.

NOTES

: This information is based on the knowledge we have so far. This SDS refers exclusively to this product. Information in this SDS is based on the available published sources and on our most accurate current level of knowledge and is believed to be accurate. However, its accuracy or reliability cannot be guaranteed or assured. The specifications of this safety data sheet describe the safety requirements of our product, but this is not a guarantee of characteristics. It is a guide for the safe handling, use, processing, storage, transport and disposal of this product and should not be construed as a guarantee or quality specification. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.