



SAFETY DATA SHEET

According to Regulation (EU) 2015/830, amending Annex II of Regulation (EC) N°1907/2006 (REACH)

BROFIL 25, BROFIL 30, BROFIL 40, BROFIL 50, BROFIL 60, BROFIL 63

Revision date: 16/10/2015

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier.

TRADE NAME	REGULATION	COMPOSITION METAL N°	DESCRIPTION
BROFIL 25	UNE.EN ISO 9453	136	S-Sn25 PB75
BROFIL 30	UNE.EN ISO 9453	116	S-Sn30 PB70
BROFIL 40	UNE.EN ISO 9453	114	S-Sn40 PB60
BROFIL 50	UNE.EN ISO 9453	111	S-Sn50 PB50
BROFIL 60	UNE.EN ISO 9453	103	S-Sn60 PB40
BROFIL 63	UNE.EN ISO 9453	102	S-Sn63 PB37

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

Identified uses

Soft welding by capillarity, tinned metals.

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.

BROQUETAS S.L.
C/ CAN SELLARÈS 12-14-16
08740 SANT ANDREU DE LA BARCA
BARCELONA - ESPAÑA
TLF.: 0034 936 401 900 FAX: 0034 936 300 938
broquetas@broquetas.es

1.4 Emergency phone.

93.640.19.00

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture.

This mixture is not classified as hazardous according to Regulation (EC) N° 1272/2008 (CLP).

2.2 Label elements.

Not applicable. This mixture is not classified as hazardous according to Regulation (EC) N° 1272/2008 (CLP).

2.3 Other hazards.

Compliance with PBT/vPvB criteria: Not classified as PBT or vPvB.

Other hazards not identified in the classification: During heating can cause slight eye, nasal and respiratory tract irritation.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures.

Chemical name	Content (%)	CAS N°	CE N°	REACH Registration	Classification CLP
Tin (Sn)	20-63	7440-31-5	231-141-8	-	Not classified
Lead (Pb)	37-80	7439-92-1	231-100-4	-	Not classified

4. FIRST AID MEASURES

4.1 Description of first aid measures.

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

Wash skin thoroughly with mild soap and water. Consult a doctor if symptoms persist.

In case of contact with eyes

Immediately rinse long with water for several minutes holding the eyelids open. Consult an ophthalmologist immediately.

In case of ingestión

Consult a doctor immediately. Do not induce vomiting. If the person is conscious, rinse mouth with water. DO NOT give water to an unconscious person. (Under the right conditions of use, the product is not ingestible).

Recommendations for first aid responders

Undetermined.

4.2 Most important symptoms and effects, both acute and delayed.

Undetermined.

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

Undefined.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media.

Suitable extinguishing media

Use dry chemical, foam or water fog.

Unsuitable extinguishing media

Unknown.

5.2 Special Hazards arising from the substance or mixture.

Hazardous combustion products

Vapors of oxides and fumes of metals.

Other specific hazards

Smoke released by the combustion of the product may cause damage to the airways.

5.3 Advice for firefighters.

In case of fire, use individual respiratory protection equipment. Firefighters must wear fire resistant protection equipment.

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.

For non-emergency personnel follow the indications described in section 8.

For emergency responders avoid contact with skin, eyes and clothing. Follow the indications described in section 8.

6.2 Environmental precautions.

Avoid contact with drains and riverbeds.

6.3 Methods and material for containment and cleaning up.

Collect the product mechanically. To completely remove, clean the surface with water.

6.4 Reference to other sections.

For more information, see sections 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling.

Prevention and protection measures: Handle the product carefully. During the welding process the product attains high temperatures so using suitable globes and eye protection and wearing a mask in poorly ventilated areas is recommended, as it is described in section 8.2.

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: Storage temperatures above 60°C should be avoided.

Containers requirements and storage areas: Store in tightly closed containers in a dry location.

Further information for storage: Keep container tightly closed.

7.3 Specific end use(s)

Product for professional use in welding at low temperatures. These products can be used for lead pipe's reparations as well as in sheet's welding of zinc, copper and lead.

For the assembly of surface mount components of the electronics industry, where a lead alloy and a low temperature has been specified.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters.

Occupational exposure limits

Tin: TLV (as TWA): 2 mg/m³ (as tin) (ACGIH 1990-1991)

Lead (metal): 0,15 mg/m³ (ACGIH 1997). LEP UE: 1 mg/m³ as TWA (UE 2000)

DNELs and PNECs

Not available.

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8.2 Exposure controls.

Appropriate engineering controls: It is recommended the use in open or well ventilated areas or the use of forced mechanical extraction.

Individual protection measures, such as personal protective equipment.

Eye/face protection

Safety goggles to avoid splashes.

PPE: Protection glasses with integrated mount.

Characteristics: «CE» Category II. Eye protector with integrated mount to use against dust, fumes, fog and vapours.

CEN standards: EN 165, EN 166, EN 167, EN 168

Maintenance: Visibility through lenses should be optimal, so their daily cleaning is required, Protectors should be disinfected periodically following the manufacturer's instructions.

Observations: Indicators of deterioration include: yellow coloring of the lenses, superficial scratching of the lenses, scraping etc.

Skin/hand protection

Use resistance gloves for tiny molten metal splashes.

PPE: Protection gloves against tiny molten metal splashes.

Characteristics: «CE» Category III.

CEN standards: EN 407: 2004, UNE-EN 12477:2002

Maintenance: They should be stored in a dry place, away from heat sources, and the exposure to sunlight should be avoided as much as possible. Do not perform modifications on the gloves that may alter their resistance, and do not apply any paints, solvents or adhesives.

Observations: Gloves should be of the right size and fit the hand without being too loose or too tight. They should always be used with clean, dry hands.

Others

Use appropriate protective clothing.

Respiratory protection

Use filter mask P3 BE EN 141 if you work for long periods of time in small, poorly ventilated spaces

PPE: Filter mask for protection against gases and particles.

Characteristics: «CE» Category III. The mask must have a wide field of vision and anatomically shaped to provide sealing and tightness.

CEN standards: EN 136, EN 140, EN 405.

Maintenance: Do not store in locations exposed to high temperatures and damp environments before use. The state of the inhalation and exhalation valves of the face adapter must be specially controlled.

Observations: Read carefully the manufacturer's instructions about the use and maintenance of equipment.

Environmental exposure controls

Take into account the usual precautions to protect the environment, see section 6.2.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties.

Appearance: Dark gray solid.

Odour: Not significant.

Odour threshold: Not applicable.

pH: Not applicable.

Melting point/freezing point: 183-263°C.

Initial boiling point and boiling range: Not applicable.



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Flash point: Non flammable.
Evaporation rate: Not applicable.
Flammability (solid, gas): Non flammable.
Upper/lower flammability or explosive limits: Not applicable.
Vapour pressure: Not applicable.
Vapour density: Not applicable.
Relative density: 9.4-11.3 g/cm³.
Solubility(ies): Water-insoluble.
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.

10. STABILITY AND REACTIVITY

10.1 Reactivity.

Stable under normal conditions (does not react).

10.2 Chemical stability.

Stable under normal conditions.

10.3 Hazardous reactions.

Heating may cause fumes of metal and vapour oxides.

10.4 Conditions to avoid.

Storage temperatures above 60°C should be avoided.

10.5 Materials to avoid.

Contact with strong acids and bases that can cause exothermic reactions should be avoided.

10.6 Hazardous decomposition products.

Not available.

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11. STABILITY AND REACTIVITY

11.1 Information on toxicological effects.

Hazard/Effect class

a) Acute toxicity:

Tin (CAS: 7440-31-5):

LC50 (Inhalation)> 5 mg/L

LD50 (Oral)> 2000 mg/kg

LD50 (dermal)>2000 mg/kg

Lead (CAS: 7439-92-1):

LC50 (Inhalation)>5,05 mg/L

LD50 (Oral)> 2000 mg/kg

LD50 (dermal)>2000 mg/kg

Mixture:

ATEmix (Inhalation)>5,02 mg/L

ATEmix (Oral)>2000 mg/kg

ATEmix (dermal)>2000 mg/kg

b) Skin corrosion/irritation

Not applicable.

c) Serious eye damage/irritation

Not applicable.

d) Respiratory or skin sensitisation

Not applicable.

e) Germ cell mutagenicity

Not applicable.

f) Carcinogenicity

Not applicable.

g) Reproductive toxicity

Not applicable.

h) STOT-single exposure

Not applicable.

i) STOT-repeated exposure

Not applicable.

j) Aspiration hazards

Not applicable.

k) Symptoms

During heating can cause slight eye, nasal and respiratory track irritation.

l) Chronical effects

Only after years of constant activity in unfavorable conditions, there may be risk of pulmonary edema.

12. ECOLOGICAL INFORMATION

12.1 Toxicity information.

No data available.

12.2 Persistence and degradability.

No data available.



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12.3 Bioaccumulative potential.

No data available.

12.4 Mobility in soil.

No data available.

12.5 Results PBT and vPvB assessment.

Not classified as PBT nor vPvB.

12.6 Ecological effects information.

Other side effects are not known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods.

Appropriate methods of waste treatment of both substance or mixtures

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.

Appropriate methods for removing contaminated packaging

Handle contaminated containers as the product itself.

14. TRANSPORT INFORMATION

	ADR/RID	AND/ADNR	IMDG	IATA
14.1. UN number				
14.2. UN proper shipping name				
14.3. Transport hazard class(es)				
14.4. Packing group				
14.5. Environmental hazards				
14.6. Special precautions for user				
Special dispositions				
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code				

The product is not classified according to transport agreements.

Not applicable.

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15. REGULATORY INFORMATION

15.1 Waste treatment methods EU regulations.

REACH authorizations: The product does not contain a substance present in the candidate list of SVHC, and in Annex XIV of REACH.

REACH use restrictions: The product has no restriction of use.

Regulation (EC) 2037/2000 on substances that deplete the ozone layer: Not applicable.

15.2. Chemical safety assessment.

An evaluation of the product's chemical safety has not been carried out.

16. OTHER INFORMATION

Changes to the previous version

Format adaptation to the REACH Regulation amendment, the Regulation (EU) 2015/830.
Mixture classified according to Regulatory (CE) 1272/2008 (CLP).

Abbreviations and acronyms

SDS: Safety data sheet
PBT: Persistent, bioaccumulative and toxic
vPvB: Very persistent and very bioaccumulativ
TLV: Thershold Limit Values
TWA: Time Weighted Average
ACGIH: American Conference of Industrial Hygienists
DNEL: Derived non-effect level
PNEC: Predicted non-effect concentration
SVHC: Substances of Very High Concern
LD50: Median Lethal dose
LC50: Median Lethal Concentration
ATEmix: Acute toxicity estimated of the mixture

Key literature references and sources for data

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

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

Calculation performed after the classification of substances in the mixture.

Advice on any training appropriate for workers:

Maintenance and production plant crew has received information and training on the safety instructions in plant and equipment.



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NOTES

This information is based on the knowledge we have so far. This SDS refers exclusively to this product. All chemical substances in this product have been reported or are exempt from notification under notification to the EC laws. Information in this SDS is based on the available published sources and is believed to be accurate. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application. The specifications of this safety data sheet describes the safety requirements of our product, this is not a guarantee of characteristics. They are based on current state.