

MATERIAL SAFETY DATA SHEET

BROFIL – Lead Solder Wire

Safety data sheet according to 91/155/CEE

1. PRODUCT, PREPARATION AND COMPANY IDENTIFICATION

Product trade name : BROFIL 30 | 40 | 50 | 60 | 63

Manufacturer: BROQUETAS, S.L.
Pol.Ind. Fonollar, C/ Murcia, 3-5
E-08830 Sant Boi de Llobregat | Barcelona | Spain
TEL: +34 93 3070691

Information service: BROQUETAS, S.L.

Alloys

Product Name	Alloy N° ISO 9453	Alloy Designation	Melting Temp °C
BROFIL 30	116	S-Pb70Sn30	183 – 255
BROFIL 40	114	S-Pb60Sn40	183 – 238
BROFIL 50	111	S-Pb50Sn50	183 - 213
BROFIL 60	103	S-Sn60Pb40	183 eutectic
BROFIL 63	102	S-Sn63Pb37	183 eutectic

Alloys compliant with current standard: EN-ISO 9453: 2006

Flux cores

Flux core Name	Classification & Compliance
B2.2	1.1.3.B (EN-ISO 29454-1) / ROMO (J-STD-004)
B2.1	1.1.2.B (EN-ISO 29454-1) / ROM1 (J-STD-004)
B1.2	1.2.3.B (EN-ISO 29454-1) / REM0 (J-STD-004)
B1.1	1.2.2.B (EN-ISO 29454-1) / REM1 (J-STD-004)

Fluxes compliant with current standard: EN-ISO 29454-1

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Composition	CAS N°	EINECS N°	Symbol	R Phrases
Tin	30-63	7440-31-5	231-141-8	Sn	61-20/22-33-50/53-62
Lead	37-70	7439-92-1	231-100-4	Pb	61-20/22-33-50/53-62
Rosin	± 2	8050-09-7	-----	-----	-----
Activators	0.5	-----	-----	-----	-----

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3. HAZARDS IDENTIFICATION

Eyes	Burns caused by the melted material
Skin	Burns caused by the melted material
Ingestion	Harmful due to lead content.
Inhalation	It may be harmful and damage health in case of inhalation of the fumes emitted when this product is heated. It must be only used in ventilated areas.

The activators of the resin do not implied any hazard given its low concentration in the final product.

4. FIRST AID MEASURES

Eyes	Flush immediately with water. Get dermatologist attention.
Skin	Wash with soap and water.
Ingestion	Wash mouth with water and seek medical attention.
Inhalation	Evacuate to fresh air and seek medical attention.

5. FIRE FIGHTING MEASURES

Specific hazards	None, the product cannot explode or become inflamed.
Extinguishing media	Use pulverized water or foam
Fire- fighting equipment	Foresee breathing protection. Use face mask.

6. ACCIDENTAL RELEASED MEASURES

The supplied state of the material, present no risk of spillage.

- Individual precautions

Use gloves to avoid burns in case of contact with the product.

- Environmental protection precautions

Avoid the product entering into underground water pipes or ground waters.

- Cleaning methods

Collect the product by mechanical means, avoiding dust formation. To remove completely, clean the surface with plenty of water.

7. HANDLING AND STORAGE

. Handling

Whenever it is possible, avoid contact with skin. Use in well ventilated areas. Avoid direct inhalation of fumes.

. Preventive instructions against explosions and fires: no special requirements.

. Storage

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- . Requirements to be met by premises with storerooms and containers:
No special requirements.
- . Remarks for combined storage: not required
- . Further instructions about storage conditions:
Keep container tightly sealed.
Store in tightly closed and dry environments.
- . Storage class: VFD Class (Regulation on fluid fuels): deleted

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

. Additional instructions for the fitting of technical facilities:

With the molten material: use in ventilated environments, or well equipped with fume extraction.
Components with acceptable limit values that require monitoring at the workplace: the product does not contain any relevant quantities of substances which limit values must be controlled in the workplace.

. Additional instructions: the current lists at the time of preparation were used as basis.

. Personal protective equipment.

. General protective and hygienic measures:

Keep away from food, drinks and animal food.
Wash hands before breaks and after work.
Avoid contact with eyes and skin.

Respiratory protection: Use mask in poorly ventilated places.



Skin Protection: Gloves, only during the heating process.



Eye protection: Wear safety goggles to prevent potential spills during the operational phase.



Exposure limit values:

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Substance Name	VLA-ED (mg/m ³)	VLA-EC (mg/m ³)
Tin	2	----- -
Lead	0.15	----- -
Rosin	----- -	----- -
Activators	----- -	----- -

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Colour	Silver grey
Odour	None
Flash point	Not applicable
Combustion properties	Non oxidant
Ignition	Not applicable
Danger of explosion	Not applicable
Relative density	8.82
Specific volume	118 cc/gr

10. STABILITY AND REACTIVITY

- . Stability
- . Heat: heating may cause oxides steams and metal fumes.
- . Humidity: Keep the product dry.
- . Duration: Product not expired.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Tin: 40 µg/m ³ Lead: 2,0 mg/ m ³
Exposure ways	Inhalation
Acute effects / symptoms	During its heating may cause slight eye, nasal mucous and respiratory tract irritation.
Chronic effects	Only after years of constant activity in unfavourable conditions, it may present risk of lung edema.

12. ECOLOGICAL INFORMATION:

. General notes:

Level of damage to water 1 (self-classification): limited danger for water. Do not allow the undiluted product or in large quantities to infiltrate in ground waters, in water courses or in water pipes. It must not end up in sewages or drainage ditches.

13. DISPOSAL CONSIDERATIONS

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. Storage and handling:

Recommendation: Do not be disposed of this substance with household waste. It should not reach sewer system.

. Unclean packaging:

Recommendation: Dispose of according to official regulations.



14. INFORMATION CONCERNING TRANSPORT

There is no special consideration in this regard.

15. REGULATORY INFORMATION

. Rating: This product is not subject to classification according to the criteria by the EC Directives on the Control of Dangerous Substances and Preparations.

. R-Phrases:

R 20/22 Harmful by inhalation and ingestion.

. S-Phrases:

S 2 Keep out of the reach of children.

S 13 Keep away from food, drinks and feed.

S 21 Do not smoke while using it.

S 26 In case of contact with eyes, rinse immediately with plenty water and consult a doctor.

WARNING: USE ONLY IN WELL VENTILATED AREAS, as when this product is heated may emit dangerous fumes for health if inhaled.

16. OTHERS INFORMATION

The information is based on the current state of our knowledge but no guarantees of product features and shall not establish a legally valid contractual relationship.

. Last update: **August 2013**
. Department issuing data sheet: **Broquetas, S. L.**
. Prepared by: Lourdes NAVALPOTRO
. Title: Quality Manager

. Signature:

