

BRAZING MATERIALS · MATERIALES SOLDADURA FUERTE
MANUFACTURERS SINCE 1930 · FABRICANTES DESDE 1930



- BROQUETAS S.L. is a family business, founded in 1930, and devoted to the manufacture of soft soldering and brazing alloys. Our company's priority is to satisfy our customer's needs, by a continuous research to improve our products and settling strict quality controls.

An expertise longer than 80 years in soldering and exhaustive quality controls allows us to make our product with the best quality and a competitive price. We take care even of the smallest detail in our manufacture procedures and products.

This is the reason why we have built loyalties with our customers and a good market share in domestic market and international. In the last few years our output growth has been sustained by an important investment in industrial equipment.

Nowadays we have two automatic production lines with oven, strainer, shear, presser and wire drawing machine. This renovation allows being present in the domestic market and extending commercial lines to other countries.

- Totally engaged with quality and excellent service.

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ISO 9001: 2015 quality approved company by AENOR



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Totally engaged with quality and excellent service

BROQUETAS SL has as a main goal his customers' satisfaction offering a good quality product and service, in a constant improvement. This is the reason why it assumes the following quality principles:

- BROQUETAS SL organisation focuses all its activity to satisfy his customers' needs, in accordance to laws and regulations concerned. As a result, it settles different tools for the constant evaluation of its customer's satisfaction.
- BROQUETAS SL managers promote the application of Quality management systems ISO 9001:2015 (Certified by AENOR) to settle their engagement and responsible management in order to guarantee their quality aims.
- BROQUETAS SL manages its activity and resources to carry out, focusing on procedures to reach their aims efficiently.
- Quality is a common aim in all company areas and everyone needs to consider himself as a customer and supplier of the rest departments.
- Company management considers all staff implication as the clue for the quality project, so they promote continuous training and group motivation in its human resources.
- BROQUETAS takes its decisions and acts considering data analysis. Continuous improving constitutes a main goal for the organisation





Certificate of Conformity:



Our Analytical Laboratory will supply the Certificate of Conformity (C.O.C.), and the Lot/Batch Analysis Certificates to guarantee and assure the tolerances of the components and the quality of our alloys.

All our alloys are produced in conformity with the best known International Norms, as the American Welding Society AWS A5-3, or the German DIN 851 A, or the British Standard BS 1845, or the ISO 17672

Due to its size, its geographical situation (BARCELONA, Spain) and its specialization, Broquetas S.L is a company capable of providing its clients, wherever they are in the world, with any kind and quantity of brazing alloy, in any format and presentation, in the shortest time.

Count on us and please do not hesitate to contact us.

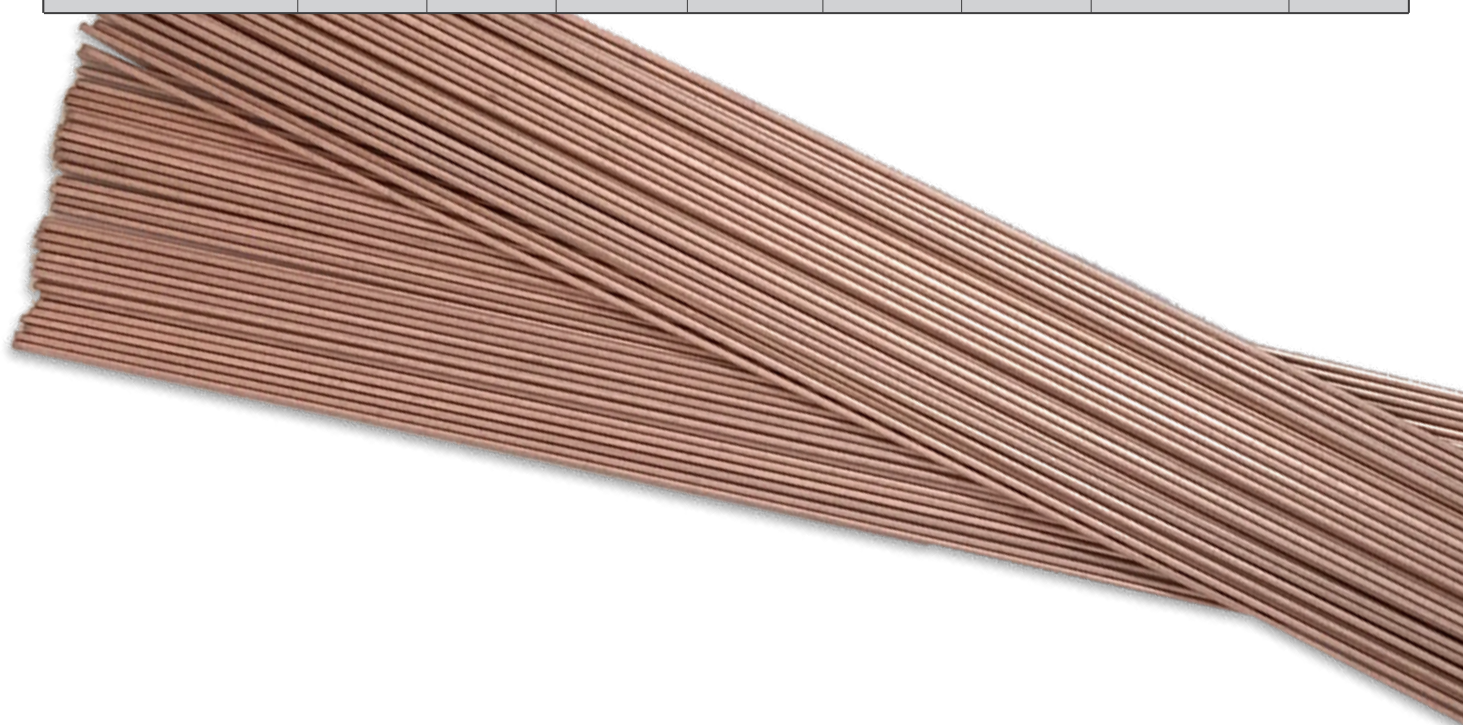
COPPER PHOSPHORUS BRAZING ALLOYS

In accordance with norm UNE-EN -ISO 17672:2010

BROQUETAS S.L produces a wide range of Copper Phosphorus alloys, with and without Silver. Their outstanding feature is their ability to braze copper in air without the use of fluxes since, due to the presence of Phosphorus, these alloys have self-fluxing properties when brazing copper to copper. These characteristics are improved by the addition of Silver.

These alloys are unsuitable for brazing Nickel, Nickel-based alloys, ferrous metals and copper alloys containing Nickel and Iron. The brazed joints become inherently brittle due to the formation of intermetallic compounds.

FAMILY	STANDARDS			NOMINAL COMPOSITION %				
	EN ISO 17672	DIN 851 A	WS A5.3	Ag	P	Cu	Melting range T°C	Brazing T°C
Copper-phosphorus alloys	CuP 179	L-CuP 6	-	-	6,3	Bal.	710 / 860	760
	CuP 180	L-CuP 7	BCuP-2	-	7	Bal.	710 / 805	730
	CuP 182	L-CuP 8	-	-	7,8	Bal.	710 / 750	720
	CuP 385	-	BCuP-9	Sn : 6,5	6,5	Bal.	635 / 675	645
Copper-silver-phosphorus alloys	CuP 286	L-Ag 18 P	-	18	7	Bal.	645 / 645	645
	CuP 284	-	BCuP-5	15	5	Bal.	645 / 800	700
	CuP 283	-	BCuP-4	6	7	Bal.	643 / 755	720
	CuP 281	L-Ag 5P	BCuP-3	5	6	Bal.	645 / 810 ??	710
	CuP 282	-	BCuP-7	5	6,8	Bal.	643 / 770 ??	710
	CuP 279	L-Ag 2P	-	2	6,3	Bal.	645 / 830	740
	CuP 280		BCuP-6	2	7	Bal.	645 / 790	740



COPPER PHOSPHORUS BRAZING ALLOYS

FLEX WIRE

In accordance with norm UNE-EN -ISO 17672:2010

FAMILY	STANDARDS			NOMINAL COMPOSITION %			Melting range T°C	Brazing T°C
	EN ISO 17672	DIN 8513	AWS A5.3	Ag	P	Cu		
Copper-phosphorus alloys / Drawn quality Ring production	CuP 179	L-CuP 6	-	-	6,3	Bal.	710 / 860	760
	CuP 180	L-CuP 7	BCuP-2	-	7	Bal.	710 / 805	730
	CuP 182	L-CuP 8	-	-	8	Bal.	710 / 750	720
Copper-silver- phosphorus alloys / Drawn quality /Ring production	CuP 286	L-Ag 18 P	-	18	7	Bal.	645 / 645	645
	CuP 284	-	BCuP-5	15	5	Bal.	645 / 800	700
	CuP 281	L-Ag 5P	BCuP-3	5	6	Bal.	645 / 810 ??	710
	CuP 279	L-Ag 2P	-	2	6,3	Bal.	645 / 830	740

COPPER PHOSPHORUS BRAZING ALLOYS

SPARK FREE "INNOVALLOYS"

In accordance with norm UNE-EN -ISO 17672:2010



FAMILY INNOVALLOYS	STANDARDS			NOMINAL COMPOSITION %			Melting range T°C	Brazing T°C
	EN ISO 17672	DIN 8513A	AWS A5.3	Ag	P	Cu		
Copper-phosphorus alloys / Spark Free	CuP 179	L-CuP 6	-	-	6,3	Bal.	710 / 860	760
	CuP 180	L-CuP 7	BCuP-2	-	7	Bal.	710 / 805	730
	CuP 182	L-CuP 8	-	-	7,8	Bal.	710 / 750	720
Copper-Silver phosphorus alloys / Spark Free	CuP 284	-	BCuP-5	15	5	Bal.	645 / 800	700
	CuP 281	L-Ag 5P	BCuP-3	5	6	Bal.	645 / 810 ??	710
	CuP 279	L-Ag 2P	-	2	6,3	Bal.	645 / 830	740



SILVER BRAZING ALLOYS

In accordance with norm UNE-EN -ISO 17672:2010

Silver alloys are used in all the industrial fields where high quality joints between dissimilar metals are required. All these alloys are suitable for all common engineering materials with the exception of aluminum and its alloys.



FAMILY	STANDARDS			NOMINAL COMPOSITION %						Cd	MELTING RANGE T°C	Brazing T°C
	EN ISO 17672	DIN 8513M	AWS A5.3	Ag	Cu	Zn	Ni	Sn				
Silver Binary Alloys	-	-	-	30	70					FREE	779 / 980	980
	Ag 272	-	BAG-8	72	28					FREE	778 / 778	778
Silver Cadmium Free Alloys / Ternary	Ag 205	-	-	5	55	40				FREE	820 / 870	870
	Ag 212	-	-	12	48	40				FREE	800 / 830	830
	-	L-Ag 20	-	20	44	36				FREE	690 / 810	810
	Ag 225	L-Ag 25	-	25	40	35				FREE	700 / 790	790
	Ag 230	L-Ag 30	BAG-20	30	38	32				FREE	680 / 765	765
	Ag 244	L-Ag 44	-	44	30	26				FREE	675 / 735	735
	Ag 245	L-Ag 45	BAG-5	45	30	25				FREE	665 / 745	745
Silver Cadmium Free Alloys / Ternary / Doped Alloys	Ag 425	-	BAG-26	25	38	33	2	Mn 2		FREE	705 / 800	800
	Ag 427	L-Ag 27 Mn	-	27	38	20	5,5	Mn 9,5		FREE	680 / 830	830
	Ag 440	-	BAG-4	40	30	28	2			FREE	670 / 780	780
	Ag 449	L-Ag 49 Mn	BAG-22	49	16	23	4,5	Mn 7,5		FREE	680 / 705	705
	Ag 450	-	BAG-24	50	20	28	2			FREE	660 / 705	705
Silver Cadmium Free Alloys / Quaternary	Ag 125	L-Ag 25Sn	BAG-37	25	40	32		2		FREE	680 / 760	760
	Ag 130	L-Ag 30Sn	-	30	36	32		2		FREE	665 / 755	755
	Ag 134	L-Ag 34Sn	-	34	36	27,5		2,5		FREE	630 / 730	730
	Ag 138	L-Ag 38Sn	BAG-34	38	32	28		2		FREE	650 / 720	720
	Ag 140	L-Ag 40Sn	BAG-28	40	30	28		2		FREE	650 / 710	710
	Ag 145	L-Ag 45Sn	BAG-36	45	27	25,5		2,5		FREE	640 / 680	680
	Ag 155	L-Ag 55Sn	-	55	21	22		2		FREE	630 / 660	660
	Ag 156	L-Ag 56Sn	BAG-7	56	22	17		5		FREE	620 / 655	655

- Other alloys can be provided upon request
- These alloys can also be provided in other formats: reels or spooled (depending on the diameter). It can also be provided in solder rings.

BRASS BRAZING ALLOYS

In accordance with norm UNE-EN -ISO 17672:2010

They are very economical alloys for general use on ferrous metals, alloys of copper, steel and cast iron.

Poor Capillarity (that is, it is not fluid) and needs a high working temperature (over 900°C).

It must be kept in mind that overheating should be avoided, since the alloy loses its possibilities for making a good joint.

FAMILY	STANDARDS			NOMINAL COMPOSITION %						Melting range T°C	Brazing T°C
	EN ISO 17672	DIN 8513	AWS A5.3	Cu	Zn	Si	Ag	Ni	Other		
Brass Alloy	Cu 470	-	RBCuZn-A	59	Bal.				Sn: 0,25 / Fe : 0,25 max / Impurity:0,2 ma	875 / 895	895
	Cu 680	-	-	58	Bal.	0,15			Sn: 0,9 / Mn : 0,35 / Ni : 0,6 / Fe : 0,25 max / Impurity:0,2 ma	870 / 890	890
	Cu 471	L CuZn40	RBCuZn-C	58	Bal.	0,17			Sn: 0,25 / Mn : 0,15 / Fe : 0,25 max / Impurity:0,2 max	870 / 900	900
	Cu 773	-	RBCuZn-D	48	Bal.	0,17		10	Fe: 0,25 max /mpurity : 0,2 max	890 / 920	920
	Cu 681	-	RBCuZn-B	58	Bal.	0,1			Sn: 0,9 / Mn : 0,2 / Ni : 0,5 / Fe : 0,9 / Impurity:0,2 max	870 / 890	890
		-		59	Bal.	0,3			Sn: 1 / Mn : 1 / Impurity : 0,2 ma	870 / 890	890
Brass Alloy Silver Doped	-	-	-	60	Bal.	-	1		Sn : 0,25 / Mn : 0,15 / Fe : 0,25 max / Impurity : 0,2 max	870 / 900	900
	-	-	-	49	Bal.	0,17	1	10	Fe : 0,25 max / Impurity : 0,2 max	870 / 900	900

ALUMINIUM ALLOYS

In accordance with norm UNE-EN -ISO 17672:2010

For repair of zinc-based metals, pot metal, white metals and aluminum.

Alu-Zinc alloys are a self-fluxing, low temperature joining alloys that can be used with oxy-acetylene or GTAW process, using argon as the shielding gas and AC (high frequency). It is excellent to use for new fabrication, maintenance or repair work. Flux is not necessary on accessible joints.

Common uses include: aluminum windows, doors, furniture, boats, engine heads, motor housings, power mowers, farm & dairy equipment, blocks and crankcases, vacuum cleaners, carburetors, gears & pumps, jigs & fixtures, dies & matchplates, trophies & ornaments, models & patterns, antique car parts and Kirksite dies.

FAMILY	STANDARDS			NOMINAL COMPOSITION %				Melting range T°C	Brazing T°C
	EN ISO 17672	DIN 8513	AWS A5.3	Al	Si	Zn	Other		
Aluminum	Al 105	-	-	95	5	-		575 / 630	-
Aluminum-Silicium	Al 112	-	BAISi-4	88	12	-		575 / 585	585
Aluminum-Silicium / Flux Cored	Al 112	-	BAISi-4	88	12	-	Flux ratio : 24% (+/-3%) / Non corrosive flux - Type 1	575 / 585	585
Zinc-Aluminum	-	-	-	98	-	2		377 / 385	385
Zinc-Aluminum / Flux Cored	-	-	-	98	-	2		385 / 420	420
Zinc-Aluminum	-	-	-	78	-	22		385 / 420	420
Zinc-Aluminum / Flux Cored	-	-	-	78	-	22		385 / 420	420

SPECIAL ALLOYS

Many alloys could be produced following the customer specifications, with variation of the metals percentage or "specials" adding, as Silicon.

Alloys such as:

- B-Ag 24
- B-Ag13
- B Ag60CuNiMn
- B-Ag60CuSn; L-Ag85
- L-Ag49
- L-Ag50CdNi



All our alloys compliants
RoHS directive

BRAZING FLUXES

In accordance with norm EN -1045

BROQUETAS have a wide range of Fluxes in different forms such as powder, paste, cream, gel and liquid, specially formulated to obtain perfect and clean joints.

The objective and purpose of the Fluxing in the brazing and welding processes is to prevent the formation, dissolve or facilitate the removal of the oxides or any other undesirable substance from the surfaces to be joined.

Another fundamental objective of Fluxes is to assure the formation of a perfect brazed joint by protecting the base filler metal from oxidation and to reduce surface tension, allowing a free and perfect flow of the filler alloys.

		STANDARDS			
PRODUCT		EN 1045	DIN 8511	AWS A5.31	FORM
BROPOLS	SILVER BRAZING FLUX	FH10	F-SH1	FB3-F	POWDER
BROPOLS FINE	SILVER BRAZING FLUX	FH10	F-SH1	FB3-F	FINE GRAIN POWDER
BROPOLS PASTE	SILVER BRAZING FLUX	FH10	F-SH1	FB3-F	POWDER PASTE
BROPOLS INOX	ALUMINIM BRAZING FLUX	LH10	F-LH1	FB1-A	POWDER
BROPOLS BRASS	BRASS BRAZING FLUX	FH21	-----	FB3-D	POWDER
FLUIDIX 1	FLUXIGAS FLUX	FH21	-----	-----	LIQUID
FLUIDIX 2	FLUXIGAS FLUX	FH21	-----	-----	LIQUID

FLUXIGAS EQUIPMENT FOR GREEN FLAME BRAZING

Special equipment to handle our FLUIDIX gasflux.

The primary reasons for use the flame brazing are:

1. It is a very flexible heating proceses.
2. A very wide range of gases can be used.
3. It is very easy to develop alternative heat patterns.
4. The equipment for flame brazing with a handheld torch is readily portable.
5. Brazing on outside locations and within the workshop is easily undertaken.



AVAILABLE FORMATS

RODS



From diam 0.3mm (or less depending of the alloy) to 10mm (or more depending of the alloy).

Standard length from 500mm to 1000mm, specials lengths from 20mm (or less depending of the alloy and diam).

FLUX COATED RODS



Silver rods (and brass) flux coated. Different diameters, quality of coating and types of coating.

Possibility of different colors and "printing" on the rods.

WIRES (coils) & SPOOLS



Wires (coils)

From 0,3mm (or less depending of the alloy) to 10mm (or more depending of the alloy).

Spools

From 100gr. to 10-12 kg (or more depending of the alloy and the diameter).

SILVER ALLOYS FOILS



Thickness from 0.1mm (or less depending of the alloy) to 1mm (or more depending of the alloy).

Wide from 2.5mm (or less depending of the alloy) to 60mm (or more depending of the alloy).

Other sizes can be produced on special order.

ALLOY L-AG15P IN FOIL

Thickness from 0.1mm to 1mm.

Wide from 2.5mm to 45mm.

Other sizes can be produced on special order.

Materials supplied on coils or spools (depending of wide).

PASTES



Different alloys, with flux included or not. Mainly all the Silver alloys with or without Cadmium.

As well as Copper Phosphor with or without Silver or only Copper, or Copper Nickel alloy.

RINGS AND PREFORMS



Available for all the alloys; Silver, Copper Phosphor with or without Silver, Brass and other alloys such as Soft Solders or Aluminium.

Possibility for all wire diameters and ID, as well as special rings with "multi turns".

Preforms : conform to drawing -> cylinders, shapes, half rings etc...

POWDERS



Grain sizes from 60 to 700 microns
(multiform grains).

Or in shavings in different sizes.

FLUXES



All the most suitable fluxes for a correct brazing, available in powder, paste, liquid and gel.

PACKAGING

RODS

1Kg. in red plastic bags, cored rods in transparent plastic box;

5Kg. in transparent plastic bag.

POWDER & PASTE FLUXES

100g, 200g, 250g and 1Kg in plastic jar.

LIQUID FLUXES

1L, 5L and 10L in plastic jerrycan

REELS & SPOOLS

100g: 30un/box; 250g: 50un/box; 500g: 20un/box; 1Kg: 16un/box. 10Kg & 12Kg can be provided upon request.

SILVER ALLOYS FOILS

Materials supplied on coils or spools (depending of wide).



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COMMERCIAL NETWORK

Thanks to our broad commercial network in Europe, Broquetas S.L exports to more than 60 countries all over the world:

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