



Investissement
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Dinamismo Développement
Team Qualité
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Excellence **Innovation**
Partenariat
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Dynamisme

**BRAZING RANGE
ALLOYS AND FLUXES**

Selectarc

COPPER-PHOSPHORUS ALLOYS

	Type	Shape		Main characteristics	Melting range (°C)	Classification		
		Bare				EN ISO 17672	AWS A5.8	DIN 8513
MANUAL BRAZING	PHOSBRAZ M60	x		Special purpose - fitting	710-860	CuP 179	-	L-Cu P6
	PHOSBRAZ V6	x		Special purpose - fitting	710-845	CuP 179	-	L-Cu P6
	PHOSBRAZ P66	x		Intermediate alloy	710-825	CuP 180	-	L-Cu P6
	PHOSBRAZ P68	x		Intermediate alloy	710-805	CuP 180	-	L-Cu P7
	PHOSBRAZ M70	x		Capillary brazing	710-805	CuP 180	B Cu-P 2	L-Cu P7
	PHOSBRAZ M73	x		Controlled fluidity	710-785	CuP 181	B Cu-P 2	L-Cu P7
	PHOSBRAZ E80	x		High fluidity	710-750	CuP 182	-	L-Cu P8
	PHOSBRAZ E80+	x		Very high fluidity	710-738	CuP 182	-	L-Cu P8
	PHOSBRAZ 675Sn	x		Very high fluidity - copper and tin alloy	635-675	CuP 385	B Cu-P 9	L-Cu P9

COPPER-PHOSPHORUS ALLOYS - FURNACE BRAZING

	Type	Shape		Main characteristics	Melting range (°C)	Classification		
		Bare				EN ISO 17672	AWS A5.8	DIN 8513
FURNACE BRAZING	PHOSBRAZ 840	x		Furnace brazing - high temperature	710-840	CuP 179	-	L-Cu P6
	PHOSBRAZ 815	x		Furnace brazing - medium fluidity	710-815	CuP 180	-	L-Cu P7
	PHOSBRAZ 790	x		Furnace brazing - medium fluidity	710-790	CuP 181	B Cu-P 2	L-Cu P7
	PHOSBRAZ 770	x		Furnace brazing - high fluidity	710-770	CuP 182	B Cu-P 2	L-Cu P7
	PHOSBRAZ 750	x		Furnace brazing - very high fluidity	710-750	CuP 182	-	L-Cu P8
	PHOSBRAZ 738	x		Furnace brazing - very high fluidity	710-738	CuP 182	-	L-Cu P8

COPPER-PHOSPHORUS-SILVER ALLOYS

	Type	Shape		Main characteristics	Melting range (°C)	Classification		
		Bare	Coated			EN ISO 17672	AWS A5.8	DIN 8513
MANUAL BRAZING	PHOSBRAZ M68	x		CuP Ag / 0,2 % Ag	710-815	-	B Cu93 P	Ag 710-815
	PHOSBRAZ AG4	x		CuP Ag / 0,4 % Ag	700-825	-	-	-
	PHOSBRAZ AG10	x		CuP Ag / 1 % Ag	650-820	-	B Cu93 P	Ag 650-820
	PHOSBRAZ AG20	x		CuP Ag / 2 % Ag	645-825	CuP 279	-	L-Ag 2 P
	PHOSBRAZ AG20+	x		CuP Ag / 2 % Ag - high fluidity	643-788	CuP 280	BCuP-6	-
	PHOSBRAZ AG50	x		CuP Ag / 5 % Ag	645-815	CuP 281	BCuP-3	L-Ag 5 P
	PHOSBRAZ AG50+	x		CuP Ag / 5 % Ag - high fluidity	643-771	CuP 282	BCuP-7	-
	PHOSBRAZ AG60	x	x	Copper piping / 6 % Ag, + Ni	643-813	CuP 283a	-	-
	PHOSBRAZ AG61	x		Copper piping / 6 % Ag	643-813	CuP 283	BCuP-4	-
	PHOSBRAZ AG100	x	x	Copper-brass joints / 10 % Ag	650-750	-	-	-
	PHOSBRAZ AG150	x		Copper-brass joints / 15 % Ag	645-800	CuP 284	BCuP-5	L-Ag 15 P
	PHOSBRAZ AG180	x		CuP Ag (copper piping) / 18 % Ag	645	CuP 286	-	L-Ag 18 P
	PAG 60		x	Combustible gas installations / 6 % Ag	645-725	NF A81-362: CuP 291		

BRAZE-WELDING ALLOYS

	Type	Shape		Main characteristics	Melting range (°C)	Classification		
		Bare	Coated			EN ISO 17672	AWS A5.8	DIN 8513
MANUAL BRAZING	CUPROX	x	x	Braze-welding and repair of stainless steel, copper or cast-iron	870-890	~Cu 471	~RCu-Zn C	L CuZn40
	SUPER-CUPROX	x	x	Braze-welding alloy with 1 % Ag	850-870	-	-	-
	506	x	x	Braze-welding alloy with nickel	890-900	-	-	-
	NICROX 49 C1	x	x	High strength braze-welding	890-920	Cu 773	RB Cu Zn-D	L CuNi10Zn42
	SUPER-NICROX	x	x	High strength braze-welding with 1 % Ag	870-900	-	-	-



Certification of the Technical Association of the Gas Industry in France (ATG)
 Filler alloys and brazing fluxes used for bonding natural gas and propane piping require the approval of the French Gas Association (AFG). Products that meet these criteria are identified by the above symbol.

PRODUCTION UNDER QUALITY CONTROL, TECHNICAL KNOW-HOW, HIGH QUALITY PRODUCTS, CUSTOMIZATION, RESPONSIVENESS,



SILVER ALLOYS

	Type	Shape			Main characteristics	Melting range (°C)	Classification		
		Bare	Coated	TBW			EN ISO 17672	AWS A5.8	DIN 8513
TERNARY ALLOYS	BRAZARGENT 1505	x	x		Ternary alloys / 5 % Ag	820-870	Ag 205	-	L-Ag 5
	BRAZARGENT 1512 Si	x	x		Ternary alloys / 12 % Ag NEW	800-830	Ag 212	-	L-Ag 12
	BRAZARGENT 1520 Si	x	x		Economical, all joints (except for Al) / 20 % Ag	690-810	-	-	L-Ag 20
	BRAZARGENT 1535	x	x		Ternary alloys / 35 % Ag	685-755	Ag 235Si	BAg-35	-
	BRAZARGENT 1544	x	x		Ternary alloys / 44 % Ag	675-735	Ag 244Si	-	L-Ag 44
QUATERNARY ALLOYS	BRAZARGENT 5018	x	x		Cadmium-free / 18 % Ag	720-790	-	-	-
	BRAZARGENT 5025	x	x		Cadmium-free / 25 % Ag	680-760	Ag 125Si	BAg-37	L-Ag 25 Sn
	BRAZARGENT 5030	x	x	x	Cadmium-free / 30 % Ag	665-755	Ag 130Si	-	L-Ag 30 Sn
	BRAZARGENT 5034	x	x	x	Cadmium-free / 34 % Ag	630-730	Ag 134Si	-	L-Ag 34 Sn
	BRAZARGENT 5038	x	x	x	Cadmium-free / 38 % Ag	650-720	Ag 138Si	BAg-34	-
	BRAZARGENT 5040	x	x	x	Universal Ag brazing alloy (except for Al) / 40 % Ag	650-710	Ag 140Si	BAg-28	L-Ag 40 Sn
	BRAZARGENT 5045	x	x	x	Cadmium-free / 45 % Ag	640-680	Ag 145Si	~BAg-36	L-Ag 45 Sn
	BRAZARGENT 5055	x	x		Cadmium-free / 55 % Ag	630-660	Ag 155Si	-	L-Ag 55 Sn
	BRAZARGENT 5056	x	x	x	Superior physical properties / 56 % Ag	620-655	Ag 156Si	BAg-7	L-Ag 56 Sn
	BRAZARGENT 34GAZ	x			Combustible gas installations / 34 % Ag	630-730	Ag 134 according to ATG B.524-3 certification		
	BRAZARGENT 3049+	x	x		High strength	680-705	Ag 449Si	BAg-22	L-Ag 49
	BRAZARGENT 3050	x	x	x	Cadmium-free / 50 % Ag, 2 % Ni NEW	660-705	Ag 450Si	BAg-24	-

ALUMINIUM ALLOYS

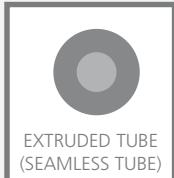
	Type	Shape			Main characteristics	Melting range (°C)	Classification	
		Bare	TBM	TBW			Composition	EN ISO 17672
SOLID WIRES	ZINAL 4	x		x	For joining dissimilar materials Cu/Al	377-385	98 % Zn - 2 % Al	DIN 1707-100 S-Zn 98 Al 2
	AL12	x			Al/Al joints	575-585	88 % Al - 12 % Si	Al 112
TBW / TBM WIRES	ZINAL 4 TBW	x		x	For joining dissimilar materials Cu/Al (flux and alloy)	385-420	98 % Zn - 2 % Al	DIN 1707-100 S-Zn 98 Al 2
	HARASIL NC 12* TBW			x	Al/Al joints (flux and alloy)	575-585	88 % Al - 12 % Si	Al 112
	TBM 12 NCs*		x		Al/Al joints (flux and metal mix)	550-585	88 % Al - 12 % Si	Al 112
	TBM 12 NCs 20*		x		Al/Al joints (flux and metal mix) NEW	550-585	88 % Al - 12 % Si	Al 112

* Non-corrosive flux.

BRAZING FLUXES

	Type	Shape		Main characteristics	Melting range (°C)	Classification
		Powder	Paste			
	AGFLUX	x	x	For silver brazing/boric acid-free flux	500-800	FH10
	AG ACTIVE PASTE		x	For brazing copper, brass, steels, stainless steels and nickel base alloys, boric acid free NEW	580-880	FH10
	BORINOX	x	x	For steel brazing	500-800	FH10
	POLYFLUX	x	x	For braze-welding	800-1000	FH20
	FLUX ODAL	x		For aluminium	450-550	FL10
	ALUNOX NC	x		For aluminium/non-corrosive flux/Al12	560-570	FL20
	ALUNOX NCs	x		For aluminium/non-corrosive flux/ZINAL 4	420-450	FL20
	PHOS FLUX (L)	x	x	Liquid flux for joining copper and copper alloys NEW	550-880	FH10

TUBULAR BRAZING WIRE



EXTRUDED TUBE
(SEAMLESS TUBE)

FLUX

- 12 % for Ag
- 20 % for Al
of total weight

TUBULAR BRAZING WIRE (TBW)

TBW is a brazing flux cored wire, used for manual as well as automatic brazing. The flux is filled in the extruded seamless tube ensuring a constant alloy to flux ratio. This filled tube is drawn to lower diameter in steps.



ART. COMING OF FLUX FROM THE TUBE



FLUX START MELTING



BRAZING COMPLETED WITHOUT OVER-SPILLAGE

MEAN FEATURES

Easy to use: 2 in 1 product, no additional fluxing

TBW is a cost economic solution compared to conventional brazing products:

- less alloy consumption: optimum usage of alloy and limit over-flow
- higher productivity: consistent quality and mechanized brazing
- less rejection: better visibility during operation
- less post-braze cleaning: less residues due to optimum flux ratio
- less inventory: no need of paste appliance and more storage space
- less consumable wastage: no coating fragility

User-friendly:

- less fatigue: less fumes, no fluxing
- better operator safety: no splashing

Health & safety:

- no physical contact with the flux/coating
- environmental friendly: conform to REACH/ECHA and RoHS
- higher shelf life even in tropical climates

Available in different forms (rods, spools, rings, preforms...)



PRODUCT RANGE

Product name	% Ag	Alloy	EN ISO 17672	AWS A5.8	Melting Range (°C)
■ BRAZARGENT 5030 TBW NEW	30	Cu-Ag-Zn-Sn	Ag 130Si	-	665-755
■ BRAZARGENT 5034 TBW	34	Cu-Ag-Zn-Sn	Ag 134Si	-	630-730
■ BRAZARGENT 5038 TBW	38	Cu-Ag-Zn-Sn	Ag 138Si	BAG-34	650-720
■ BRAZARGENT 5040 TBW	40	Cu-Ag-Zn-Sn	Ag 140Si	BAG-28	650-710
■ BRAZARGENT 5045 TBW	45	Cu-Ag-Zn-Sn	Ag 145Si	~BAG-36	640-680
■ BRAZARGENT 5056 TBW	56	Cu-Ag-Zn-Sn	Ag 156Si	BAG-7	620-655
■ BRAZARGENT 3050 TBW	50	Cu-Ag-Zn-Ni	Ag 450Si	BAG-24	660-705
■ HARASIL NC 12 TBW	-	Al-Si (88:12)	Al112	BAISI-5	575-585
■ ZINAL 4 TBW	-	Zn-Al (98:2)	DIN 1707-100 : S-Zn 98 Al 2		382-420



SPOOL AND COILS



RODS



RINGS



PACKING

DIMENSIONS AND DIFFERENT FORMS AVAILABLE

Rod = diam x length (mm)	Wire diameter (mm)	Internal ring diameter (ID, mm)	Weight per spool (D100, D200, D300...)	Coils (dimensions, weight)
1.00 to 5.00 x 500 / 1000	0.80 to 3.00	2.00 to 20.00 or more	0.500 to 10 Kg/spool	On request

Note: customized alloys, wire sizes and pre-forms can be manufactured on request.

HOW TO CHOOSE?

PRODUCT SELECTION ACCORDING TO BASE METALS



PRODUCTS COMPLIANCE WITH THE RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE (RoHS)

**WE DEVELOP ALLOYS ACCORDING TO
YOUR SPECIFICATIONS!
JUST CONTACT US!**

- 1st **“STANDARD” CHOICE:**
The best solution in terms of performance-cost ratio.
- 2nd CHOICE **“TECHNICAL PERFORMANCE”:**
The solution that provides ease of implementation and optimum final result.

BASE METALS	STEEL	ALUMINIUM	COPPER	CAST-IRON (PREHEATING AND SLOW COOLING)	STAINLESS STEEL	BRASS	GALVANISED STEEL	NICKEL
NICKEL	BRAZARGENT 5040* BRAZARGENT 5056*	-	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*	CUPROX ENROBÉ BRAZARGENT 1520Si*	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*
GALVANISED STEEL	CUPROX ENROBÉ BRAZARGENT 1520Si*	ZINAL 4 TBW	CUPROX ENROBÉ BRAZARGENT 5034*	CUPROX ENROBÉ BRAZARGENT 5034*	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5034* BRAZARGENT 5040*	CUPROX ENROBÉ BRAZARGENT 5034*	
BRASS	BRAZARGENT 5034* BRAZARGENT 5040*	ZINAL 4 TBW	PHOSBRAZ AG100 ENROBÉ BRAZARGENT 5034*	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*	PHOSBRAZ AG100 ENROBÉ BRAZARGENT 5034*		
STAINLESS STEEL	BRAZARGENT 5040* BRAZARGENT 5056*	ZINAL 4 TBW	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*	BRAZARGENT 5040* BRAZARGENT 5056*			
CAST-IRON (PREHEATING AND SLOW COOLING)	CUPROX ENROBÉ BRAZARGENT 5040*	-	CUPROX ENROBÉ BRAZARGENT 5040*	CUPROX ENROBÉ BRAZARGENT 5040*				
COPPER	CUPROX ENROBÉ BRAZARGENT 1520Si*	ZINAL 4 TBW	PHOSBRAZ M73 (standard joints) PHOSBRAZ M60 (special for pitting)					
ALUMINIUM	ZINAL 4 TBW	HARASIL NC 12 TBW TBM 12 NCs						
STEEL	CUPROX ENROBÉ BRAZARGENT 1520Si*							

Ref. *: for use in conjunction with AGFLUX, AG ACTIVE PASTE, flux coated rods or TBW.
Ref.: embedded flux of self-fluxing alloy.



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