

silver brazing alloys

Reference	Melting range	Composition					Characteristics				Standards		
		Ag %	Cu %	Zn %	Cd %	Others %	Rm MPa	A %	d g/cm ³	NF EN	AWS	EN ISO 3677 1044	A5.8
TERNARY													
BRAZARGENT 1505	820-870 °C	5,0	54,5	40,4			380	15	8,4	AG 208		B Cu55ZnAgSi 820-870	
BRAZARGENT 1520 SI	690-810 °C	20,0	46,0	33,8		0,2 Si	400	20	8,4	--		B Cu46ZnAgSi 690-810	
BRAZARGENT 1544	675-735 °C	44,0	30,0	26,0			400	25	8,9	--	BAG-5	B Ag44CuZn 675-735	
BRAZARGENT 1545	680-800 °C	45,0	41,5	13,5			470	25	9,3	--		B Ag45CuZn 680-800	
CADMIUM BEARING													
BRAZARGENT 2017	610-780 °C	17,0	41,0	26,0	16,0		380	30	8,7	--		B Cu41ZnAgCd 610-780	
BRAZARGENT 2020	610-780 °C	20,0	40,0	27,0	13,0		380	32	8,5	AG 309		B Cu42ZnAgCd 610-780	
BRAZARGENT 2021	610-750 °C	21	34,8	26	17	0,2 Si	380	32	8,6	**AG308		B Cu 35Zn AgCd 610-750	
BRAZARGENT 2025	605-720 °C	25,0	30,0	27,5	17,5		380		8,8	AG 307	BAG-33	B Cu 30 Zn Ag Cd 605-720	
BRAZARGENT 2030	610-690 °C	30,0	28,0	21,0	21,0		380	30	8,8	AG 306	BAG-2a	B Ag30CuZnCd 610-690	
BRAZARGENT 2034	610-670 °C	34,0	25,0	20,0	21,0		400	30	8,9	--		B Ag34CuCdZn 610-670	
BRAZARGENT 2035	610-700 °C	35,0	26,0	21,0	18,0		420	29	8,9	AG 305	BAG-2	B Ag35CuZnCd 610-700	
BRAZARGENT 2040*	595-630 °C	40,0	19,0	21,0	20,0		450	30	9	AG 304		B Ag 40ZnCdCu 595-630	
BRAZARGENT 2042	610-620 °C	42	17	16	25		450	30	9,1	AG 303		B Ag 42 Cd Cu Zn 610-620	
BRAZARGENT 400	595-630 °C	40,0	19,0	21,0	20,0		450	30	9	AG 304		B Ag 40ZnCdCu 595-630	
BRAZARGENT 2045	605-620 °C	45,0	15,0	16,0	24,0		450	30	9,1	AG 302	BAG-1	B Ag45CdZnCu 605-620	
BRAZARGENT 2050	625-635 °C	50,0	15,5	16,5	18,0		450	35	9,2	AG 301	BAG-1a	B Ag50CdZnCu 625-635	
BRAZARGENT 2550	635-660 °C	50,0	15,5	15,5	16,0	3 Ni	450	25	9,2	AG 351	BAG-3	B Ag50CdCuZnNi 635-660	
CADMIUM FREE													
											Sn%		
BRAZARGENT 5018	720-790 °C	18	47,2	33		1,8	450	15	8,4	--		B Cu 47 Zn Ag Sn 720-790	
BRAZARGENT 5025	680-760 °C	25,0	40,0	33,0		2,0	510	18	8,5	AG 108	BAG-37	B Cu40ZnAgSn 680-760	
BRAZARGENT 5030	665-755 °C	30,0	36,0	32,0		2,0	500	18	8,8	AG 107		B Cu36ZnAgSn 665-755	
BRAZARGENT 5034*	630-730 °C	34,0	36,0	27,0		3,0	500	20	8,7	AG 106		B Cu36AgZnSn 630-730	
BRAZARGENT 5038*	660-700 °C	38,0	31,0	28,8		2,2	520	18	8,8	--	BAG-34	B Ag38CuZnSn 660-700	
BRAZARGENT 5040*	650-710 °C	40,0	30,0	28,0		2,0	500	17	9,1	AG 105	BAG-28	B Ag40CuZnSn 650-710	
BRAZARGENT 5045*	640-680 °C	45,0	27,0	25,0		3,0	500	14	9,1	AG 104	BAG-36	B Ag45CuZnSn 640-680	
BRAZARGENT 5055	630-660 °C	55,0	21,0	22,0		2,0	510	11	9,2	AG 103		B Ag55ZnCuSn 630-660	
BRAZARGENT 5056*	620-655 °C	56	22,5	Rest		5,0	350	25	9,5	AG 102	BAG-7	B Ag 56 Zn Cu Sn 620-655	

Nota : The asterisk** in front of the standard means close to the norm.
The standards NF and DIN are substituted for the European standard NF EN 1044 of July 1999

REBOUD-ROCHE is continuously developing its silver solder range designated BRAZARGENT.

These alloys are used for brazing steel, brass, bronze, nickel alloys and copper. Brazing Alloys from this range are used to join most Ferrous and Non-Ferrous metals with the exception of Aluminium and Magnesium. These Alloys have good Brazing properties and can be pre-positioned prior to heating, or manually applied during heating. **Suitable for all heating methods.** Lap joints are recommended, however, butt joints can be used where conditions are less demanding.

Clearances between 0.05-0.13 mm are recommended, depending on the Fluidity of the alloy used, in order to achieve capillarity. **A flux is necessary when brazing in open atmospheric conditions.**

High silver contents in brazing alloys allow to work at relatively low temperatures.

3 MAIN FAMILIES:

BRAZARGENT 15... A ternary range Silver-Copper-Zinc, with melting ranges above 720°C, and good ductility.

BRAZARGENT 20... A quaternary family containing the previously mentioned metal and Cadmium. They are suitable for low temperature and good fit-up applications due to their excellent penetration. These alloys have a high mechanical strength and they are recommended when a low melting point is required : low tenor in zinc and cadmium.

BRAZARGENT 50... Cadmium-free A specially developed range created to replace the BRAZARGENT 20.. when the use of Cadmium is not permitted (food and sanitary industry, Middle East and Northern European countries).

PRESENTATION Bare or Flux Coated rods, wire in coils or on spools. Under special request: **Tubular Brazing Wires (TBW*) in wire, rods, rings and pre-forms.**