

Brazing Alloy - BRZ

DiaPac™ provides general-purpose silver brazing alloys used in the Oil and Gas Market. These alloys typically have low temperature with short melting ranges, free flowing alloys that are versatile and are easy to use having high strength. These families of brazing alloy have excellent flow characteristics and mechanical properties used on ferrous and non ferrous materials. DiaPac offers these alloys in a wide range of compositions to suit specific applications. Available in Wires, Rods, Strips, Wire Flattening, Wire Preforms, Strip Preforms, Granules, and Spheres. With the help of the chart below, identify and compare alloys of our Silver Based Alloys suited to your needs.

*Other alloys and sizes are available upon request.

Grade of Brazing Alloy Item ID	Product Description	Nominal Composition %				Melting Range °F / °C	International Standards			
		Ag	Cu	Zn	Others		BS:1845	DIN:8513	AWS:A5.8	
HMBRZ007 (Cd Free)	Bag 7 1/16" (1.57mm) Wire on Spool	56	22	17	5 Sn	(1145 - 1205) / (695-730)	AG 7	L-Ag60	BAG-7	Low melting with good flow and wetting properties. Typical applications include for food equipment on which where cadmium must be avoided, to minimize stress corrosion cracking of nickel or nickel-base alloys at low brazing temperatures,
HMBRZ011 (Cd Free)	Bag 7 1/16" (1.57 mm) Wire Rod 18" (460 mm) Length	56	22	17	5 Sn	(1145 - 1205) / (695-730)			BAG-7	
HMBRZ010 (MnNi)	Bag 22 1/16" (1.57 mm) Wire Rod 18" (460 mm) Length	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)		L-Ag49	BAG-22	Is a general purpose alloy with excellent mechanical properties. The nickel improves wetting on carbides and produces a less free flowing alloy. This gives a thicker braze joint, better able to accommodate higher stresses.
HMBRZ002 (MnNi)	Bag 22 BDC Disk 12.5 mm x .75 Thk	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)			BAG-22	
HMBRZ003 (MnNi)	Bag 22 BDC Disk 18.5 mm x .75 Thk	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)			BAG-22	
HMBRZ008 (CdFree)	Bag 24 1/16" (1.57mm) Wire on Spool	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)			BAG-24	A free flowing, cadmium free brazing filler metal, suitable for use in joining 300 series stainless steels and for brazing tungsten carbide tips to tools.
HMBRZ012 (CdFree)	Bag 24 1/16" (1.57 mm) Wire Rod 18" (460 mm) Length	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)			BAG-24	
HMBRZ013 (CdFree)	Bag 24 1/8" (3.17 mm) Wire Rod 18" (460 mm) Length	49	16	23	7.5Mn, 4.5Ni	(1256-1292) / (680-700)			BAG-24	
HMBRZ013 (CdFree)	Bag 24 BDC Disk 12.5 mm x .75 Thk	50	20	28	2Ni	(1220 - 1382) / (660-750)		—	BAG-24	
HMBRZ017 (CdFree)	Bag 24 BDC Disk 8 mm x .75 Thk	50	20	28	2Ni	(1220 - 1382) / (660-750)			BAG-24	
HMBRZ018 (CdFree)	Bag 24 BDC Disk 15.2 mm x .75 Thk	50	20	28	2Ni	(1220 - 1382) / (660-750)			BAG-24	
HMBRZ014 (Cd Free)	Bag 36 1/16" (1.57 mm) Wire Rod 18" (460 mm) Length	45	27	25	3Sn	(1184 - 1256) / (640-680)		L-Ag45Sn	BAG-36	Low temperature, free flowing, Cd-free alloy. Ideally suited to the brazing of tubes for air conditioning and refrigeration systems and heated towel rails.
HMBRZEXP 43 (Cd Free)	Ag 5 1/16" (3.17 mm) Wire Rod 18" (460 mm) Length	43	37	20	3Sn	(1274 - 1418) / (690-770)	AG5	—	—	Used for brazing of ferrous and non ferrous metals other applications similar to Diapac BAG-5.
HMBRZEXP 45 (Cd Free)	Bag 5 1/16" (3.17 mm) Wire Rod 18" (460 mm) Length	45	30	25	3Sn	(1238 - 1364) / (670-740)	AG15	L-Ag44	BAG-5	An excellent filler metal for brazing brass parts. High ductility and ideally suited to manufacturing saw blades and band saw blades.
HMBRZEXP 55Sn (Cd Free)	AG 14 1/16" (3.17 mm) Wire Rod 18" (460 mm) Length	55	21	22	2Sn	(1148 - 1220) / (620-660)	AG14	L-Ag55Sn	—	Thin flowing quaternary alloy offering excellent fluidity and "wetting" characteristics. Ideally suited to use in the food industry, manufacturing of medical equipment and the brazing of PCD and TSP parts onto tools.

* Wires & Rods - Available in diameters from 7.00mm to 0.20mm to suit your exacting need. These are drawn from Carbide and Compax / Diamond Dies for accurate size and desired finish and spools. Spools: Available in a selection of spools and with the facility of precision layer wound. Cut Lengths: Usually cut from 200 mm - 1000 mm (8" - 36") other sizes available on request.

* Flux coated or Non flux coated - all the materials are available in pre-flux coated rod or bare rod formats.

* Wire Preform - Specially produced as per customer specification such as rings or any other shapes.

* Strips Preforms - We have a large number of dies in our stock which have the capability to stamp strips in various shapes like squares, rectangles discs, washers, or any other shape. In case of a die size not already in our inventory we have the capability to produce a simple, compound, or a progressive die.

* Customer Specifications - Forms and Size not mentioned or specified above may be available as per customer specification on request.

