

CADMIUM FREE SILVER BRAZING ALLOYS

(Comply with AS1167.1, Watermark License no. 60017 issued by AGA)

The cadmium free silver brazing alloys are used for soldering with ferrous metals, copper and copper alloys, nickel and nickel alloys, and special metal such as tungsten carbide. In part, a variety of composite alloys have different characteristics which depend on the proportion of silver. Generally, the alloys contain a high proportion of silver will lower the melting temperature; they become whiter which unlike the brass color. The fluid property of the alloy will also be improved during soldering process.

Tin is used in silver soldering alloys for the same purpose of using cadmium. Mix of tin with silver, copper, and zinc alloy can lower the melting point temperature, and improve the fluid characteristic when applied to ferrous metals.

Technical Data:

Smartco No.	Chemical Composition				AWS	Reference Data		Size	Application
	Ag	Cu	P	Other elements	Spec. Class	Solidus °C	Liquidus °C		
SGWS2P	2	91	7	<0.2	BCuP-6	645	740	3.0mm x 750mm	2% of silver spread extensively; Best used on filler joint.
SGWS5P	5	89	6	<0.2	BCuP-3	640	805	3.0mm x 750mm	5% of silver, used as a temperature inhibitor.
SGWS15P	15	80	5	<0.2	BCuP-5	645	770	2.4mm x 750mm	Lower melting range. Can be applied to various industries.
SGWS45P	45	30	----	Sn: 25	BAG-5	665	745	1.6mm x 500mm	Especially for brazing in the electric industry.