



'DROSS REDUCING SPECIAL TINNING ALLOY'

Sn60 Pb40 – Type 60 HTS

60 HTS solder alloy of Sn60Pb40Cu* in its molten state has a high resistance to surface oxidation. This is especially beneficial when used in high temperature applications. A surface film forms when the alloy reaches molten state that allows the penetration of wires or component leads for tinning, it does not adhere to the component part being soldered or tinned. The film drastically reduces the formation of oxides (dross) on the molten alloy by the prevention of atmospheric oxygen oxidising the tin content of the solder bath.

60 HTS works extremely well when used for stripping and tinning enamelled copper wire.

60HTS gives bright tinning to wires and component leads. Being a 60/40 alloy the tinned surfaces are compatible with any secondary soldering as may be required. The small amount of copper (0.12%) aids the amalgamation of the alloy with bare copper surfaces.

60 HTS reduces losses incurred through dross formation.

Also available in Lead Free Alloy form.

Chemical Characteristics

Amount of Tin:	60%
Amount of Lead:	Remainder
Tin and lead from first melting purity:	<0.12% (Cu is a component, not an impurity in this alloy)

Chart of maximum impurities, example:

Ag	Cd	Sb	Bi	Fe
0.005%	0.001%	0.01%	0.01%	0.005%

Zn	Al	As	S	Cl
0.001%	0.001%	0.001%	0.001%	0.001%

Others
0.05%

Physical Characteristics:

Melting point : Solidus @ 183C
to Liquidus @ 189C
Working temperature : 260C to 490C Optimum
Specific Weight : 8.5

Applications:

60 HTS is especially suitable for use in static soldering pots and baths at high temperatures. The duration of immersion will depend upon the mass of the component being tinned and whether or not enamel removal is required.

Note that in use, the molten solder exhibits a slightly coloured surface sheen; this is due to the film protecting the solder surface from oxidation. Care must be taken when cleaning the solder surface as far as possible remembering however that some oxides and debris will need to be removed occasionally.

MBO De-Ox Pellets may be used to supplement the level of protective film on the solder surface. See separate data sheet.

Note also, if used at temperatures of over 500C lead fumes will begin to enter the atmosphere. Fume extraction should be used in all instances involving soldering and flux irrespective of materials and process temperatures.

Packaging

Sticks : 10mm x 6mm x 450mm x ~190g each in cartons of 25Kgs.
Granules : Containers of 20 Kgs.
Ingots : Approximate weight 3.9 gs
Wire : On spools of 250gms, 500gms, 1kg, 3kg or 20 Kgs. Drum packs are also available with or without flux.

Storage: Original packaging, at an average temperature of 20°C for 12 months.