

Sn95/Sb5 – Organic Acid 3% Core

NOMINAL COMPOSITION

Tin	94% Min	Lead	0.1% Max	Arsenic	0.01% Max
Antimony	4.5% –5.5%	Cadmium	0.005% Max	Iron	0.04% Max
Copper	0.08% Max	Aluminum	0.005% Max	Zinc	0.005% Max
Silver	0.015% Max	Bismuth	0.15% Max		

Flux – 3% Organic Acid Core by weight

PHYSICAL PROPERTIES

Solder Alloy

Color	White
Melting Point (Solidus)	450°F (233°C)
Flow Point (Liquidus)	464°F (240°C)
Specific Gravity	7.26
Density (Lbs/in ³)	0.263
Bulk Room Temperature Tensile Strength (PSI)	5,900

Flux

Type	Water Soluble Organic Acid
Physical State	Solid
Melting Point	250°F (120°C)
Chloride Content	4%

SOLDERING CHARACTERISTICS

Sn95/Sb5 is a general-purpose solder used in applications involving soldering of copper and copper alloys and/or ferrous base alloys where use of lead containing solder is not permitted. This soft solder may be used in applications involving higher service temperatures. Typical applications for this alloy include copper components in air conditioning industry. This alloy is also recommended in applications involving food handling or drinking water components where use of lead containing alloys is not permitted. Antimony bearing alloys are not recommended in soldering of brass parts due to formation of a brittle Sb-Zn inter-metallic.

This flux-cored solder can be used on difficult to solder materials where rosin based fluxes and electronic grade organic fluxes are not strong enough. It has been used effectively in many non-electronic applications such as lamps, fuses, and jewelry. The flux is active on copper, brass, bronze, steel, nickel, and stainless steel.

PROPERTIES OF SOLDER JOINTS

The properties of a soldered joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.

REMOVAL OF FLUX RESIDUE

The post-soldering residues of this product are completely soluble in water. Cold water soaking can be used. However, hot water will greatly accelerate the cleaning process.

AVAILABLE FORMS

Flux-Cored Wire on 5lb or 10lb spools.

SPECIFICATIONS

Sn95/Sb5 alloy conforms to the following specifications:

- American Society for Testing and Materials (ASTM) B32 Sb5 WAC 3

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 63-919

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Material Safety Data Sheet for 95/5.

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