



TECHNICAL INFORMATION SHEET

50/50 TIN LEAD SOLDER

NOMINAL CHEMICAL COMPOSITION%:

Lead	Remainder
Tin	49.5-51.5
Antimony	0.20 – 0.50

TYPICAL PHYSICAL PROPERTIES:

Solidus	361°F (183°C)
Liquidus	421°F (216°C)

SOLDERING PROPERTIES:

With some exceptions, the tin lead solders can be used to solder copper and most copper alloys, lead, nickel alloys, and steel. 50/50 solder is used for general purpose soldering applications including sheet metal work. Tin lead solders are not recommended in high stress or vibration joints in the cooling industry due to lack of sufficient elongation properties. Heat sources include soldering guns, irons, and air-fuel torches.

Lead bearing solders are not to be used in potable water systems.

AVAILABLE FORMS

Standard wire diameters

RECOMMENDED FLUX:

Stay Clean® soldering fluxes are recommended except on electrical or electronic applications which require the use of a non-corrosive rosin flux. Remove all flux residues after soldering.

SPECIFICATION COMPLIANCE:

ASTM B32 Alloy Grade Sn 50
J-STD-006 Sn50Pb50Sb0.4

SAFETY INFORMATION:

WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

HEAT RAYS, (infrared radiation) from flame or hot metal can injure eyes.

- Before use, read and understand the manufacturer's instructions, Safety Data Sheets (SDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the flame, or heat source, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 8669 Doral Blvd., Doral, Florida 33166; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

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