Technical Bulletin

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TSC Lead-Free Solid Solder Wire

DESCRIPTION

TSC Lead-Free Solid Solder Wire is supplied in 99C & 96S alloys as standard. The use of a solid wire offers you the ability to undertake finer detailed soldering work then would be otherwise unachievable with larger blowpipe or tinmans sticks, due to both the lack of accessibility & excessive volume created once melted. The lower melting temperature will also help prevent distortion when soldering sheet panels and give the opportunity to create step soldering when adding finer details.

A solid wire will also give you the ability to choose a flux formulation that is specifically designed to remove the oxides from the metal substrates you are working on, brass, copper, steel, iron etc. Lead free solder wires melt at a higher temperature than leaded options, therefore care should be taken when undertaking any soldering close to an existing solder joint to prevent reflow.

A lead free solid wire provides the ability to choose a flux formulation that is specifically designed to remove the oxides from the metal substrates you are working on. Once a correct flux has been chosen then the lead free solder alloy will flow smoothly, offers good capillary action and creates a good solder joint on most metals. For flux recommendation view out 'Soldering of Metals guide' or contact a member of our technical team.

This wire is supplied on 50g reels as standard but may be available in larger quantities on request.

FEATURES AND BENEFITS

- Two Lead-Free Alloys available (99C & 96S)
- Excellent solderability
- Good Capillary Action
- Very low impurity levels.
- Refined grain structure.
- 96S Alloy ideal for stainless steel
- Both Suitable for Potable water

PRODUCT INFORMATION

Alloy	Melting or Solidus / Liquidus Temp ℃
99C (Sn99.3/Cu0.7)	227 / 228
96S (Sn96.5/Ag3.5)	221

APPLICATION

It is important to match the geometry of the solder tip to the size of lead or component pad you are working on. As a guide line for lead free solders a tip temperature of between 370° - 425°C is ideally suited.

HANDLING & STORAGE

Indefinite shelf life applies to solid solder. For other product categories, refer to those specific TDSs. Consult MSDS for additional handling procedures and precautions.

HEALTH & SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.