

## Technical Bulletin

Issue 1 - 29/06/23

### TSC AluSol Flux Cored Solder Wire

#### DESCRIPTION

TSC AluSol Flux Cored Solder Wire is carefully formulated to offers excellent soldering onto aluminum and many of its common alloys. The wire is suitable for wrought and cast aluminum soldering techniques with Magnesium contents up to 3%

This solder wire would not be suitable for aluminum with a Magnesium content higher than 3%, together with Chromium or Titanium,

#### FEATURES AND BENEFITS

- Highly suitable for soldering aluminum and aluminum alloys
- High Flux activation offers excellent capillary flow.
- Fast wetting.
- Compatible with most aluminum soldering applications.
- Good resistance to electrolytic corrosion
- Post solder residues easily removed with deionized water
- Very low spattering

#### APPLICATION

TSC AluSol solder wire can be used in conjunction with various methods of soldering, such as using a blow torch, soldering irons, induction coils and resistance heating can all be considered depending upon the process employed. Care must be taken however at elevated temperatures since some carbonisation of the flux may result.

Care should be taken at high soldering temperatures as some carbonisation may well affect the post solder flux residues causing issues in cleaning.

#### HANDLING & STORAGE

All cored solder wires should be stored in clean dry areas away from moisture and direct sunlight. Do not freeze.

**Shelf life:**

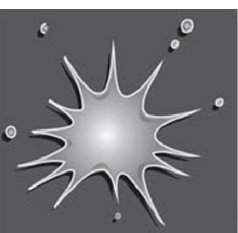
3 years	< 85°F (< 29°C)
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#### CLEANING

TSC AluSol's post soldering residue must be removed. For residue removal we recommend using water, ideally de-ionised if available. In most cases you will not need any additional surfactant chemistry, but care should be taken at elevated soldering temperatures to avoid excessive temperature and prolonged exposure as carbonisation of the residues may take place

#### 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.



# SOLDER CONNECTION

UK: +44(0)1291 624 400

solderconnection.com

Ire: +353 (1) 842 1172

## TECHNICAL DATA

<b>Specifications</b>	
<b>Flux Classification</b>	ORH1
<b>Flux Content</b>	2.5 %
<b>Flux Type</b>	Blend of Organic and inorganic compounds.
<b>Residues</b>	Must be removed with water
<b>Density</b>	
Leaded:	10.1 g/cm <sup>3</sup>
Lead-Free:	7.3 g/cm <sup>3</sup>

## AVAILABILITY

<b>Alloy Designation</b>	<b>Melting or Solidus / Liquidus Temp °C</b>
Leaded - Sn18 Pb80 Ag2	217 / 221
Lead-Free - Sn97 Cu3	227 / 320

Supplied on 250g & 500g Reels.

Standard Diameters in Leaded Alloy: 0.9mm & 1.6mm

Standard Diameters in Lead-Free Alloy: 2mm

Other Diameters may be available on request

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