

# Water Soluble Cored Wire Solder

| Features:             |                           |                                                   |
|-----------------------|---------------------------|---------------------------------------------------|
| - Halide-Free         | - Good Thermal Transfer   | - For Standard and High-Temperature Applications  |
| - High Activity Level | - Good Wetting Properties | - Extended Cleaning Times, Safe Up to 2 to 3 Days |
| Degenintions          |                           |                                                   |

## **Description:**

WS482 is a water soluble, halide-free flux cored wire that is highly active and compatible with water soluble solder paste chemistries. WS482 offers improved thermal stability, allowing it to be processed with standard or high temperature alloys. WS482 offers residues that are non-corrosive and therefore may be used without cleaning for applications where conductivity will not cause a problem (such as soldering wires). Post-process residues are safe to remain on many assemblies for up to two to three days. WS482 produces excellent tarnish and oxide removal, will not tarnish PCBs, copper, or solder joints, and offers excellent wetting and soldering characteristics. WS482 flux residue is readily soluble in hot water. IPC flux classification for this material is ORM0.

## Availability:

- WS482 is standard with a 3.0% flux core for tin-lead (3.0% flux core for lead-free) alloys.
- WS482 is available in Sn/Pb, Sn/Ag/Cu, SN100C<sup>®</sup> alloys.
- Standard spool sizes; ½ lb. for .010 and .015 diameters, 1 lb. for .020, .032, .040, .050, and .062 diameters.
- Packaging of <sup>1</sup>/<sub>2</sub> lb. and 1 lb. spools is standard in 12 lb. and 24 lb. cases.
- Other flux percentages, alloys, diameters and spool sizes may be available upon special request.

# **Application:**

- Solder iron tip temperature should be between 350° 400°C (650° 750°F) for Sn63 and Sn62 alloys, 370° 425°C (700° 800°F) for Sn/Ag and Sn/Ag/Cu alloys.
- Hold the solder iron at a  $45^{\circ}$  to  $60^{\circ}$  angle to the work surface.
- The solder iron should contact both the component lead and PCB pad surface.
- Solder and flux should flow onto both the lead and pad or lead and barrel to promote optimum flux activity to the joint being worked.
- If additional flux is needed, the use of AIM's 716 flux is recommended. Operators should use an applicator capable of dispensing precise amounts of flux to eliminate over-saturation and excessive flux spread.

## **Cleaning:**

Post-process residues should be removed within a two to three day period. Deionized water is recommended for the final rinse. A temperature of  $38^{\circ}$  -  $60^{\circ}$ C ( $100^{\circ}$  -  $140^{\circ}$ F) is sufficient for removing residues. An in-line or other pressurized spray cleaning system is suggested, but is not required.

## Handling and Storage:

- WS482 cored wire has a shelf life of 3 years when proper storage conditions are observed.
- Store WS482 in a clean dry area away from moisture and sunlight.
- Do not freeze this product.

## Safety:

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

## Manufacturing and Distribution Worldwide

USA +1-401-463-5605 · Canada +1-514-494-2000 · Europe +44-1737-222-258 · Mexico +52-656-630-0032 · Asia-Pacific +86-755-2993-6487 info@aimsolder.com · www.aimsolder.com *AIM IS ISO9001:2008 & ISO14001:2004 CERTIFIED* 

The information contained herein is based on data considered accurate and is offered at no charge. Product information is based upon the assumption of proper handling and operating conditions. All information pertaining to solder paste is produced with 45-micron powder. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated. Please refer to <a href="http://www.aimsolder.com/terms.cfm">http://www.aimsolder.com/terms.cfm</a> to review AIM's terms and conditions.