

## **Acid Cored Wire**

### **For Lead-bearing and Lead-free alloys**

#### **Product Description**

Kester Acid Core is a highly active inorganic acid type of flux developed for general-purpose soldering applications where a flux-cored solder wire is desirable. Rapid soldering can be accomplished on all common metals except aluminum and manganese. Acid flux is particularly useful for soldering excessively oxidized metals. Kester Acid Core possesses excellent thermal stability to function under prolonged high temperature conditions as with torch or flame soldering. It is not recommended for electrical or electronic soldering applications due to the corrosive nature of the residue.

#### **Performance Characteristics:**

- Highest activity available
- Compatible with high temperature alloys
- Easy to clean
- Classified as INH1 per J-STD-004

#### **RoHS Compliance**

This product meets the requirements of the RoHS (Restriction of Hazardous Substances) Directive, 2002/95/EC Article 4 for the stated banned substances. (Applies only if this core flux is combined with a lead free alloy)

#### **Suggested Alloys**

##### **50/50 and 40/60 - Tin/Lead:**

General purpose - for non-electrical applications such as galvanized gutters, sheet metal, radiator repair and stained glass soldering.

##### **96/4 - Tin/Silver:**

High strength, non-tarnishing. Use for jewelry, plumbing and food service equipment repairs. Blends in well with stainless steel.

##### **95/5 - Tin/Antimony:**

For joining copper tubing in air-conditioning and refrigeration equipment. Also for soldering copper pipe and fittings for drinking water systems.

## Application Notes

### Availability:

Kester Acid Core is available in a wide variety of alloys, wire diameters and flux percentages. See suggestions above for typical alloys and consult the alloy temperature chart in Kester's product catalog for a comprehensive alloy list. The standard wire diameter for most applications is 1.00mm (0.031in). Wire diameters range from 0.25 - 6.00mm (0.010 to 0.250in). A "Standard Wire Diameters" chart also is included in Kester's product catalog. The amount of flux in the wire dictates the ease of soldering for an application. For most applications, core 66 (3.3% flux by weight) is recommended. Other core sizes, 50 and 58, (1.1% and 2.2% respectively) are available. Kester Acid Core is packaged on spools of different sizes to accommodate a variety of applications.

### Process Considerations:

Solder iron tip temperatures should range between 315-400°C (600-750°F) for suggested alloys. Heat both surfaces to be soldered with the iron prior to adding Kester Acid cored wire. Apply the solder wire to a surface. Do not apply the wire directly to the soldering iron tip. If needed, Kester 3350 Inorganic Acid Flux or SP-30 Soldering Paste Flux may be used as compatible fluxes to aid in soldering joints.

### Cleaning:

The flux residue after soldering is hygroscopic and corrosive. The work should be allowed to cool undisturbed until the solder solidifies. The flux residue is then removed with a hot water rinse. For more thorough cleaning requirements, rinse with a 2 - 10% solution of Kester 5760 Neutralizer followed by a thorough hot water rinse.

For plumbing applications using Kester SP-30 Soldering Paste Flux, simply wipe off the residue with a damp cloth. This may be followed by a hot water rinse.

### Storage, Handling, and Shelf Life:

Storage must be in a dry, non-corrosive environment. The surface may lose its shine and appear a dull shade of grey. This is a surface phenomena and is not detrimental to product functionality. Flux cored solder wire has a limited shelf life determined by the alloy used in the wire. For alloys containing > 70% lead, the shelf life is two years from date of manufacture. Other alloys have a shelf life of three years from date of manufacture.

### Health & Safety:

This product, during handling or use, may be hazardous to health or the environment. Read the Material Safety Data Sheet and warning label before using this product.

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