

SM349-2

ALPHA[®] PURE CORE WIRE SOLDER

Type H3C per IPC-SF-818

GENERAL DESCRIPTION

ALPHA Pure Core is an organic activated, water soluble flux cored solder that meets the Corrosion Resistance Test and Surface Insulation Resistance requirements for Type H3C fluxes per IPC-SF-818. **ALPHA Pure Core** contains a water soluble resin derivative of rosin and a buffered organic activation system. This efficient flux produces bright, shiny solder connections, even if cleaning is delayed for several days.

USES

ALPHA Pure Core is recommended for use in any electronic hand soldering application where high fluxing strength and water cleanability are desired. Its low smoke and odor characteristics make it particularly suited for touch-up and repair of printed circuit boards where personnel are in close contact with the product.

The very effective activator system enables the flux to penetrate even heavily tarnished surfaces among the following materials:

Beryllium Copper	Copper	Solder (Plate)
Brass	Lead	Solder (Hot Dip)
Bronze	Nickel (Plate)	Terne (Plate)
Cadmium (Plate)	Silver	Tin (Hot Dip)
		Tin (Plate)

COMPANION LIQUID FLUX PRODUCT

Alpha 870 series water soluble resin flux.

TECHNICAL SPECIFICATION

Physical Properties	Typical Values
Physical State	Waxy-Solid
Flux Type	Organic, water-soluble resin
Water Extract Resistivity	> 20,000 ohm-cm
Typical pH (5% H ₂ O solution)	6.8 ± 0.5
Residues	Water soluble, biodegradable
J-STD-004	ORM1
ISO 12224	2.1.2

RESIDUE REMOVAL

The post soldering residues of **ALPHA Pure Core** are fully soluble in water. Even after several days, flux residues remain water soluble and no corrosion products are visible. Cold water soaking can be used; however, hot water will greatly accelerate the cleaning process. Additionally, **ALPHA Pure Core** flux residues can be removed in conventional solvent vapor cleaning processes employing solvent blends such as 565, as well as semi-aqueous processes employing terpene-type cleaners such as Bioact EC-7.

The information contained herein is based on data considered accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated.

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Water effluent is neutral which eliminates the need for pH adjustment prior to disposal. However, local regulations may require pre-treatment to remove dissolved lead from water effluent.

AVAILABILITY

ALPHA Pure Core is available in 63Sn/37Pb alloy, Vaculoy SAC305 and SACX0307 (Lead-Free Alloys); in a variety of wire diameters from .010 to .125; in a variety of flux percentages from 2.2% to 3.3% and in weights including 1 lb, 5 lbs and 20 lb. spools.

HEALTH & SAFETY

ALPHA Pure Core is not considered toxic; however, its use in typical soldering processes will generate a small amount of decomposition and reaction product fumes, which should be vented. The effluent for Pure Core post solder cleaning systems should be analyzed for dissolved lead.

SHELF LIFE

If >36 months from manufacture, please submit sample to Cookson Electronics Assembly Materials for testing.