

ALPHA FLUITIN AS

NO CLEAN CORED SOLDER WIRE

Type: J-STD-004 - ROL0 / IPC-SF-818 - L3CN / ISO 12224 - 1.1.3

DESCRIPTION

Fluitin AS is an activated rosin cored solder wire developed for general hand soldering applications where halide free flux has been specified.

FEATURES & BENEFITS

- *Halide Free.*
- *ROL0 – Suitable for J-STD-001B Class III – High performance electronic products.*
- *Non-corrosive, clear and safe residues.*
- *Good wetting.*
- *Pleasant pine smell.*
- *Provides good joint appearance.*
- *Available in 1.4%, 2.2% and 3.3% flux contents.*

APPLICATION

Fluitin AS is suitable for use in any commercial no-clean hand soldering application that specifies compliance to J-STD-004-ROL0.

It is suited for use in J-STD-001B Class III – High Performance Electronic Products, where halide free has been specified – products where continued high performance or performance on demand is crucial and equipment downtime cannot be tolerated and / or the end use environment may be uncommonly harsh, This classification would typically include military weapons and defence systems, aerospace, life support systems and under the hood automotive electronics.

HINTS & TIPS ON SOLDERING IN GENERAL

Always remember that a soldered joint is formed by heating the parts to be soldered to a temperature in excess of the melting point of the alloy to be used – in hand soldering this is how a soldering iron is used. By feeding the cored wire onto the parts the flux is able to flow and remove oxide films, whilst the solder creates a thin intermetallic bond which becomes the solder joint.

Note the following tips:

- Use a soldering iron bit size and form to suit the operation: small bits for soldering large components may prevent the formation of a joint or slow the process down.
- Always select wire diameters to suit both soldering iron bit and the parts/components to be soldered.
- Soldering irons systems should provide sufficient heat to satisfy the requirements of the points above.
- Cored solder wires can be provided in different grades of alloy so always ensure you have selected the right grade for the application.
- Do not overheat as this causes an increase in the depth of the intermetallic layer, which in turn weakens the joint.





TECHNICAL SPECIFICATION

Physical Properties	Typical Values	Standard	Alloy Designation	Melting or Solidus / Liquidus Temp °C	Flux Configuration
Rosin Grade:	WW per Fed Spec. LL-R-626	ISO 9453 (2)	S-Sn60Pb40	183-190	1.4%, 2.2%, 3.3%
Rosin Softening Point:	71°C (160°F)	ISO 9453 (25)	SSn60Pb38Cu2	183-190	2.2%
Acid Value:	185-200 (mg KOH/g)	LEAD FREE	SAC 305	217	2.2%
Halide Content:	None	LEAD FREE	SAC 405	217 – 219	2.2% & 3.3%
Corrosiveness:	Classified to J-STD-004 as L type material	LEAD FREE	SACX0307 LEAD FREE	217 - 228	2.2% & 3.3%
Copper Mirror:	Classified to J-STD-004 as no breakthrough				
Surface Insulation Resistance: (Not Cleaned)	Passes IPC-SF-818 Class III Test results to J-StD-004 85°C / 85 RH / 7 days CD = 3.22E10 Ohms CU = 1.69E10 Ohms (Pass >1E08 Ohms)				
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HEALTH & SAFETY

Observe standard precautions for handling and use. Use in well ventilated areas. **DO NOT SMOKE.**
Alpha Fluitin AS wire is not considered toxic. However, its use in typical soldering applications will generate a small amount of decomposition and fumes.

These fumes **must** adequately exhausted/vented for operator safety and comfort.

In order to carry out your full COSHH assessment, consult the product Material Safety Data Sheet (MSDS).



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