



SURCLEAN
Electronic Production Materials



**SURCLEAN
INDUSTRIAL**

TECHNICAL DATA SHEET

Surclean Aluma-Flux - Soft Soldering Flux for Aluminium

PRODUCT APPLICATION

Surclean Aluma-Flux is a highly reactive organic alkali Flux for rapid reliable soft soldering of Aluminium and many of its Alloys. Aluminium has a surface which reacts with air to form a strong refractory surface oxide film which because it is difficult to remove chemically, rapidly reforms, and therefore resists surface cleaning by conventional Fluxes. Surclean Aluma-Flux is formulated specifically to overcome this.

CHARACTERISTICS

Highly effective fluxing action - rapidly breaks down surface oxide film so soft soldering operation can be achieved in one operation without wire brushing or mechanical abrasion of the metal surface.

Non corrosive residues - Surclean Aluma-Flux is stable at normal ambient temperatures and will not cause surface corrosion. Post soldering residues are normally minimal and do not need to be removed in many cases, however if preferred residues can be quickly and easily removed with warm water.

Ease of flux placement - Surclean Aluma-Flux is supplied as a viscous liquid which can be easily painted onto the exact areas required. This means the area of wetting can be highly selective and excess running of solder over the joined components is avoided.

APPLICATION METHODS

Surclean Aluma-Flux will soft solder aluminium in a single operation using all normal soldering techniques, including air assist blow torch, industrial soldering iron, and hot plate methods. Aluminium is an extremely good heat conductor, but will dissipate heat energy throughout quickly. This must be taken into account, and an appropriate solder process heat source should be selected. Soldering iron tips can be applied to the joint area, but if using blow pipe heating, the flame should be directed to the area surrounding and underneath the joint area to avoid displacing the flux during the joining process. Aluma-Flux must reach its soldering temperature of 300 degrees C for adequate joint cleaning, and good solder flow. Aluma-Flux will change colour as the correct temperature is reached. Aluma-Flux can be used with a variety of LMP soldering alloys, both Lead free and Leaded, providing they are significantly under the Flux activation temperature. The Flux can be applied by brush or dispenser, and is used as supplied without dilution.

PACKAGING AVAILABILITY

Surclean Amu-Flux is packed into screw top plastic containers. Standard sizes are 150 gms and 300 gms. Larger pack sizes can be supplied subject to availability.

PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Viscous liquid gel. Colour - Dark Violet Blue.	PH: 12 (Alkali) typical as supplied.	
Odour:	Mild, slightly sweet aroma.	Flash point: None	
Boiling point:	100 deg. C.	Density: @ 1.0 gm/CM ³ at 20 deg. C.	Water solubility: 100%

HEALTH & SAFETY

Surclean Aluma-Flux should be treated as a corrosive material. Eye and skin protection must be used. Read the application notes in this technical data sheet, and refer to the safety data sheet for the product.

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