SUPERIOR SSF-RMA20
Selective Soldering Flux

SELECTIVE SOLDERING, TYPE RMA ROSIN FLUX

- **Formulated for Selective Soldering Applications**
- Alcohol Based, RMA-Type Rosin Selective Soldering Flux
- For use with lead-free and lead-bearing alloys.
- Higher activity coupled with increased temperature tolerance.
- Increased activity level to meet flow and melt-points of different Lead-Free solders.
- Conforms to MIL-F-14256, Type RMA
- Classified as IPC-STD-004, ROL1

DESCRIPTION

Superior SSF-RMA20 is a Type RMA, mildly activated rosin flux that conforms to MIL-F-14256 (Type RMA), as well as IPC-STD-004, ROL1. This RMA flux contains reduced rosin level so that with proper care, there should not be an issue with clogging of the flux spray or drop jet nozzle. This alcohol-based flux promotes the rapid activity necessary for selective soldering, and is also formulated to withstand the higher temperature requirements of selective soldering applications. (Solder temperatures in selective soldering units are often 300 – 340°C, instead of the 245-260°C typically found in wave soldering applications.) ***Superior SSF-RMA20*** leaves a rosin residue that is typically removed with a saponifier, such as Superior Flux's **SyberKleen 2000**.

PROCESS RECOMMENDATIONS

Superior SSF-RMA20 is designed to withstand the higher temperature requirements of selective soldering. Optimum topside PCB preheat temperature recommendation is 93-115°C/200-240°F. (While some selective soldering equipment is equipped with preheat mechanisms, some selective soldering equipment does not have a preheat option.) Even absent a pre-heat mechanism, ***Superior SSF-RMA20*** is designed to withstand the sudden temperature spikes typical of selective soldering. Precise solder temperature requirements will vary depending on process, board thickness, heat-sinking on PCBs, and the Lead-Free alloy being used. The addition of nitrogen gas is recommended to ensure wicking, wetting and finished assembly consistency.

The following procedures are recommended for optimum performance.

1. Make certain that the PCB surfaces are free of any oil, grease, or other impurities.
2. Regularly maintain the solder nozzle by tinning the stainless steel tip and barrel of the selective soldering solder nozzle with ***Superior No. 75*** or ***No. 23*** tinning flux.

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PHYSICAL PROPERTIES

Form	Light Brown Liquid
Specific Gravity	0.859 ± 0.025 @ 20-25°C/68-77°F
Density	7.16 lbs./gallon @ 20-25°C/68-77°F
Solids Content	20% ± 1.0%
Free Acidity	None
Chloride Content	None
Inorganic Cations	None
Spread Factor	80 minimum
Flash Point (TCC.)	12°C/53°F
Boiling Point	82.3°C/180.1°F
Freezing Effects	None
Residue Characteristics	Non-Corrosive, Non-Conductive
Water Extract Resistivity	150,000 ohm/cm
Copper Mirror Test	Passes
Soldering Range	200 -350°C/390-660°F

This Product is RoHS Compliant

SAFETY AND HANDLING PRECAUTIONS

Superior SSF-RMA20 Type RMA Selective Soldering Flux is a Flammable Liquid. Chemical safety and storage practices must be observed when handling this product. Avoid contact with eyes, skin, and mucous membranes. The use of rubber gloves, goggles and/or face shield is recommended. Use with adequate ventilation and/or respiratory protection. Refer to the Material Safety Data Sheet (MSDS) for additional information. ***SSF-RMA20*** has a two (2) year shelf life.

Superior SSF-RMA20 Type RMA flux should be stored in plastic containers in cabinets or rooms certified for storing Flammable Liquids. In the event the flux is exposed to temperatures below 0°C/32°F, the flux may freeze. Freezing will not degrade this product if these steps are followed:

❶ Thaw flux until room temperature is reached

❷ Agitate flux to return to proper consistency.

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