Metallic Resources

RoHS compliant

MetaFlux™ NC-900R
Product Bulletin

Alcohol Based No-Clean Flux

Metallic Resources' MetaFlux NC-900R is an isopropyl alcohol based low solid content No-clean soldering flux specially formulated For lead free wave soldering applications where post solder cleaning can be eliminated. It is a halide-free product which contains only non-halide activators. It is available in 1-gal. containers, 5-gal. pails, and 55-gal. drums.

Designed for Spray Fluxing

MetaFlux NC-900R is specially designed for wave soldering applications where elimination of post cleaning is desired. It is successfully used in spray and drag fluxing soldering processes.

Benign Residues

MetaFlux NC-900R has low solid contents in addition to being halide-free, which allows the product to leave only negligible traces of benign residues. It promotes excellent solderability and leaves shiny solder joints. The flux does not spatter when coming into contact with molten solder.

Application Directions

MetaFlux NC-900R is formulated for spray or drag fluxing applications as supplied. The low residue flux solids are designed to be removed by the solder bath during soldering operations. A topside board temperature of 180-220°F (82-104°C) is recommended for the best results. Solder as quickly as possible after fluxing.

Physical Properties

Form	Clear liquid
Color	Colorless
Specific Gravity	0.845 ± .005 g/cc @ 77°F (25°C)
Solids Content	1.5 – 2.4%
Flash Point	60°F (15.5°C)
Boiling Point	180.5°F (82.5°C)
Freezing Effects	None
Discoloration	None
Halide Content	0%
Water Content	<1.0%
Acid Number	19-25
Optimum Soldering Range	490-520°F (255-265°C)

Metallic Resources, Inc.

Not Your Typical Solder Company

The Solder Dross Experts

Ph: 330.425.3155 | Fax: 330.425.2180
2368 E. Enterprise Parkway | Twinsburg, OH 44087

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Safety Precautions

MetaFlux NC-900R is flammable and should be stored in plastic containers away from heat, sparks, open flame, and other sources of ignition. Use adequate ventilation to remove fumes. Avoid contact with eyes and skin. Do not inhale vapors or fumes. Keep away from children. Dispose of in accordance with all applicable regulations. This product has a one (1) year shelf life. Refer to the Safety Data Sheet (SDS) for additional information.

Standards Met

IPC J-STD-004
Type ROL0 classification
Copper Mirror Test
The test method is designed to determine the removal effect the flux has on a copper mirror.
(IPC-TM-650, 2.3.32) Result: No Breakthrough Rating Category: L
Presence of Halides (Silver Chromate Method)
The test method is designed to determine the presence of chlorides and bromides in solder flux.
(IPC-TM-650, 2.3.33) Result: Passes
Fluorides by Spot Test
This test method is designed to determine the presence of fluorides in soldering flux.
(IPC- TM-650, 2.3.35.1) Result: Passes
Halide Content
This test method is designed to determine the halide content of fluxes attributable to chlorides, bromides, and fluorides. The halide content is reported as the weight percentage of halide to the solid portion of the flux. (IPC-TM-650, 2.3.35 or 2.3.28 and 2.3.35.2 or 2.3.28)
Result: Passes (No chlorides or bromides present (0%).
Result: Passes No fluorides present (0%)
Solids Content
This test method is designed to determine the residual solids content of the liquid flux after evaporation of the volatile chemicals.
(IPC-TM-650, 2.3.34) Result: 2.2%
Corrosion Test
This test method is designed to subjectively determine the corrosive properties of the flux residue under extreme environmental conditions.
(IPC-TM-650, 2.6.15) Result: Moderate Corrosion.
Surface Insulation Resistance (SIR) Test
The surface insulation requirements for fluxes shall be determined. (IPC-TM-650, 2.6.3.3) Result: Passes. The flux exceeds the minimum requirement of 1.0E+8 Ohms average.

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