

PRODUCT DATA SHEET

1095-NF

Water-Soluble Wave Solder Flux

Introduction

1095-NF Water-Soluble Wave Solder Flux is a neutral pH formulation with a high level of activity for wave soldering through-hole, mixed-technology, and surface mount assemblies.

1095-NF is biodegradable and cleans readily in water to low ionic levels while leaving a surface which has a high surface insulation resistance (SIR).

1095-NF residue can remain on the assembly up to 48 hours without affecting the cosmetic appearance of the board.

Features

- Low solids
- High activity level
- Cleans to low ionic levels
- Cleaning can be delayed up to 48 hours
- Works with both SnPb and Pb-free alloys

Process Recommendations

- Can be applied by spray or foam
- When using with Immersion Silver and Immersion Tin, limit topside flux deposition to reduce staining

Foam Application

- Stone should be 1½–2 inches below flux surface
- Adjust air pressure to 1–3psi
- Adjust air knife pressure to 5psi to remove excess flux
- Use 16-1000 Thinner with the adjustment charts to maintain the flux density

62mil-Thick Circuit Board Process Recommendations

| Flux Deposition Rate µg/in ² solids | Preheat Temp | | Preheat Time (sec) | Alloy | Contact Time (sec) | Pot Temp (°C) |
|---|--------------|-------------|--------------------|---------|--------------------|---------------|
| | Top (°C) | Bottom (°C) | | | | |
| ≤4,500 | 100–145 | 100–145 | 60–100 | Pb-Free | 3.5–5.5 | 265–275 |
| ≤4,500 | 80–125 | 80–125 | 50–75 | SnPb | 1.5–3 | 245–260 |

93mil-Thick Circuit Board Process Recommendations

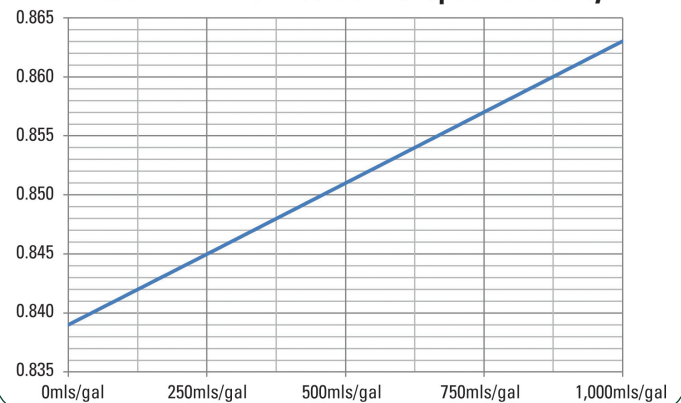
| Flux Deposition Rate µg/in ² solids | Preheat Temp | | Preheat Time (min) | Alloy | Contact Time (sec) | Pot Temp (°C) |
|---|--------------|-------------|--------------------|---------|--------------------|---------------|
| | Top (°C) | Bottom (°C) | | | | |
| ≤7,000 | 85–100 | 85–100 | 3–4 | Pb-Free | 10–12 | 270–275 |
| ≤7,000 | 80–100 | 80–100 | 1.5–3 | SnPb | 3–5 | 255–260 |

Physical Properties

| Test | Result | |
|--|----------------------|----------------|
| | 1095-NF | 16-1000 |
| Color | Clear to light amber | Clear |
| Specific Gravity @ 25°C (77°F) @ 15.5°C (60°F) | 0.838 0.844 | 0.783 0.799 |
| Solids Content | 19.5% | 0% |
| Flash Point (°F TCC) | 54 | 54 |
| J-STD-004A Flux Type | ORH1 | N/A |

*All information is for reference only.
Not to be used as incoming product specifications.*

1095-NF Thinner Addition vs. Specific Gravity



Use Thinner Addition vs. Specific Gravity chart to determine the mls/gal of thinner to add.

From One Engineer To Another®



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Shelf Life

The shelf life for this product is **3 years** in an unopened container stored at less than 32.2°C (90°F). Shelf life for an opened container will vary depending on storage conditions, including open time, temperature, and humidity. For longest shelf life of an opened container, replace cap to reduce alcohol evaporation and store in a cool, dry environment.

Safety Precautions

All fluxes with low flash points should be handled with caution. Store in a dry, well-ventilated area away from sparks, flames, and direct heat.

Packaging

- 5 gallon containers
- 55 gallon drums

Technical Support

Indium Corporation's internationally experienced engineers provide in-depth technical assistance to our customers. Thoroughly knowledgeable in all facets of Materials Science as it applies to the electronics and semiconductor sectors, Technical Support Engineers provide expert advice in solder properties, alloy compatibility and selection of solder preforms, wire, ribbon, and paste. Indium Corporation's Technical Support Engineers provide rapid response to all technical inquiries.

Safety Data Sheet

Please refer to the SDS document within the product shipment, or contact our local team to receive a copy.

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices. All Indium Corporation's products and solutions are designed to be commercially available unless specifically stated otherwise.

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

Contact our engineers: askus@indium.com

Learn more: www.indium.com

ASIA +65 6268 8678 • CHINA +86 (0) 512 628 34900 • EUROPE +44 (0) 1908 580400 • USA +1 315 853 4900



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