

# 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 <sup>2</sup> 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

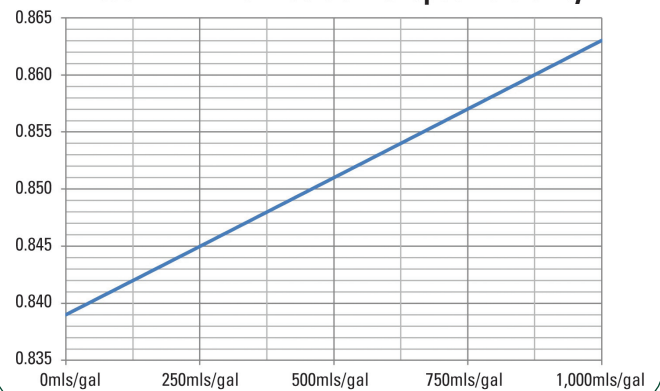
Flux Deposition Rate µg/in <sup>2</sup> solids	Preheat Temp		Preheat Time (min)	Alloy	Contact Time (sec)	Pot Temp (°C)
	Top (°C)	Bottom (°C)				
≤7,000	85–100	85–100	3–4	Pb-Free	10–12	270–275
≤7,000	80–100	80–100	1.5–3	SnPb	3–5	255–260

### 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	0.783
	0.844	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.*

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