

## PRODUCT DATA SHEET

# 1072 VOC-Free (Contains Rosin)

## Wave Solder Flux

### Introduction

**1072 Wave Solder Flux** is a halide-free, VOC-free, rosin flux specifically developed for wave soldering, surface mount, mixed technology and through-hole electronic assemblies. This unique formulation is a new advancement in flux chemistry, combining the benefits of rosin with the environmentally friendliness of a water-based product.

**1072 Wave Solder Flux** is a water-based, nonflammable formulation, eliminating special storage requirements and dramatically reducing VOC emissions. **1072 Wave Solder Flux** has excellent solderability on difficult-to-solder assemblies, and a wide process window.

### Features

- Excellent surface wetting
- Eliminates cleaning
- Excellent solderability
- VOC-free formulation
- Contains rosin

### Physical Properties

Test	Result
Color	Amber
Specific Gravity @25°C (77°F) @15.5°C (60°F)	1.017 1.017
Acid Value	25
Solids Content	5.0
Flash Point	None

*All information is for reference only.*

*Not to be used as incoming product specifications.*

### IPC Surface Insulation Resistance

Test Pattern	Board	24 Hours	96 Hours	168 Hours
IPC B24	Control	$7.67 \times 10^9$	$5.20 \times 10^9$	$4.36 \times 10^9$
	Pattern Up	$6.99 \times 10^9$	$7.07 \times 10^9$	$5.78 \times 10^9$
	Pattern Down	$1.66 \times 10^9$	$2.87 \times 10^9$	$3.45 \times 10^9$

*All readings expressed in Ohms.*

### Packaging

- 5 gallon containers
- 55 gallon drums

### Safety

**1072 Wave Solder Flux** is a nonflammable material. Standard handling precautions should be observed when handling this material.

### 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 Sheets

The SDS for this product can be found online at <http://www.indium.com/sds>

From One Engineer To Another®



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### Process Recommendations

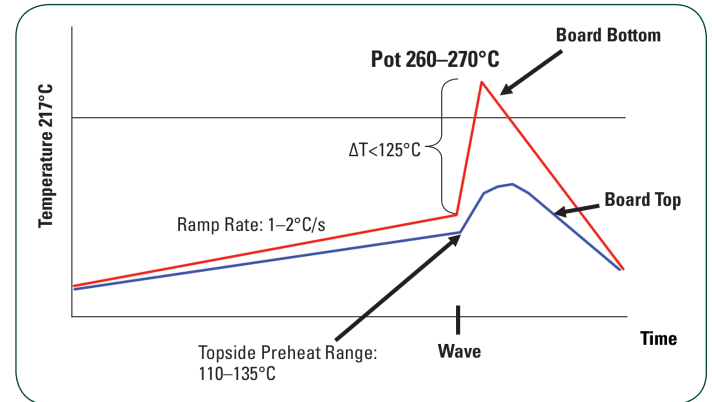
**1072 Wave Solder Flux** can be applied by spray or wave. Topside board temperatures for most circuit board assemblies can range from 110–135°C (230–275°F) depending on equipment, board size, board complexity, and conveyor speed (typically 4–6 feet/minute). Preheat should be adjusted to ensure complete water removal before contact with the solder wave.

Because **1072 Wave Solder Flux** is water-based, it does not require frequent acid value monitoring. If thinning is required, the addition of 16-1072 Thinner should be used.

**1072 Wave Solder Flux** may freeze if exposed to temperatures below 0°C (32°F). If the flux becomes frozen, bring to room temperature until thawed and agitate. The material is not affected by freezing.

Deposition Rate (micrograms/in <sup>2</sup> )	1,500–2,650
Topside Preheat (°C)	110–135
Bottomside Preheat (°C)	+0–25
Preheat Time(s)	75–150
Alloy	Pb-free
Contact Time(s)	4–5
Solder Pot Temperature (°C)	260–270

### Typical Profile for Pb-Free Wave Soldering



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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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