

PRODUCT DATA SHEET

1075 VOC-Free

Wave Solder Flux

Introduction

1075 VOC-Free is a resin/rosin-free flux specifically developed for wave soldering, surface mount, mixed-technology, and through-hole electronic assemblies.

1075 VOC-Free is a water-based, non-flammable formulation eliminating special storage requirements, and reducing VOC emissions dramatically.

Features

- VOC-free formulation
- Excellent surface wetting
- Eliminates cleaning

Process Recommendations

1075 VOC-Free should be applied by ultrasonic spray for best results. The optimum pre-heat temperature for most circuit board assemblies is 93–115°C (200–240°F). Flux deposition rate of 500–1,000 micrograms/square inch (77.5–155 micrograms/square cm) of flux solids should be applied. The conveyor speed and preheat should be adjusted to ensure complete water removal before contact with the solder wave.

Because **1075 VOC-Free** is water based, it does not require frequent acid value monitoring. If thinning is required, the addition of deionized water is all that is necessary.

1075 VOC-Free may freeze if exposed to temperatures below 32°F. If the flux becomes frozen, bring to room temperature until thawed and agitate. The material is not affected by freezing.

Physical Properties

Test	Result
Color	Clear
Specific Gravity @25°C (77°F) @15.5°C (60°F)	1.008 1.008
Acid Value	20.0
Solids Content	1.91
Flash Point (°F TCC)	None
J-STD-004 Flux Type	ORL0
Shelf Life	18 months

All information is for reference only.

Not to be used as incoming product specifications.

Packaging

- 5 gallon containers
- 55 gallon drums

Safety

1075 VOC-Free is non-flammable material. Standard 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 Material 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

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

From One Engineer To Another®



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Belcore Surface Insulation Resistance Test

Test Pattern	Boards	Initial Reading*	Final Reading*
Standard Belcore	Control	2.96×10^{11}	5.79×10^{12}
	Pattern Up	1.88×10^{11}	1.74×10^{12}
	Pattern Down	2.33×10^{12}	7.90×10^{12}

*All readings expressed in Ohms

Belcore Electromigration Resistance Test

Test Pattern	Boards	Initial Reading*	Final Reading*
IPC-B-25A	Control	1.32×10^{12}	1.81×10^{12}
	Pattern Up	8.83×10^{11}	1.74×10^{12}
	Pattern Down	1.29×10^{12}	1.74×10^{12}

*All readings expressed in Ohms

IPC Surface Insulation Resistance Test

Test Pattern	Boards	24 Hours*	96 Hours*	168 Hours*
IPC-B-25A	Control	1.74×10^{10}	5.60×10^9	3.76×10^9
	Pattern Up	3.34×10^9	2.75×10^9	3.18×10^9
	Pattern Down	1.02×10^{11}	8.22×10^9	6.28×10^9

*All readings expressed in Ohms

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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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