

PRODUCT DATA SHEET

1075-EXR 30 VOC-Free

Wave Solder Flux

Introduction

1075-EXR 30 VOC-Free is a non-halide, synthetic resin flux specifically developed for wave soldering of surface mount, mixed technology, and through-hole electronic assemblies.

1075-EXR 30 VOC-Free is a water-based, non-flammable formulation that eliminates special storage requirements, and dramatically reduces VOC emissions. **1075-EXR 30** is formulated to reduce solder balling and produce better solderability on difficult-to-solder assemblies.

Features

- VOC-free formulation
- Excellent wetting
- Eliminates cleaning
- Reduces solder balling

Process Recommendations

1075-EXR 30 VOC-Free can be applied by spray or wave. Topside board temperatures for most circuit board assemblies can range from 93–115°C (200–240°F) depending on equipment, board size, board complexity, and conveyor speed (typically 4–6'/minute). Preheat should be adjusted to ensure complete water removal before contact with the solder wave. Convection preheat is strongly recommended for optimum results.

Because **1075-EXR 30 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-EXR 30 VOC-Free 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.

Physical Properties

Test	Result
Color	Clear
Specific Gravity @ 25°C (77°F) @ 15.5°C (60°F)	1.015 1.015
Acid Value	30.0
Solids Content	4.5
Flash Point	None
Silver Chromate Paper Test	Pass
Copper Mirror Test	Pass
Freeze/Thaw Test	Pass
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-EXR 30 VOC-Free is non-flammable. 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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Telcordia Surface Insulation Resistance Test

Test Pattern	Boards	Initial Reading*	Final Reading*
Standard Bellcore	Control	5.14×10^{11}	6.11×10^{11}
0.0125" Wide Lines	Pattern up	4.95×10^{12}	5.99×10^{12}
0.0125" Spacing	Pattern down	2.58×10^{11}	2.56×10^{11}

*All readings expressed in Ohms.

Telcordia Electromigration Resistance Test

Test Pattern	Boards	Initial Reading*	Final Reading*
IPC-B-25A	Control	3.49×10^9	4.32×10^9
0.0125" Wide Lines	Pattern up	3.21×10^9	5.99×10^9
0.0125" Spacing	Pattern down	1.01×10^9	2.43×10^9

*All readings expressed in Ohms.

IPC Surface Insulation Resistance Test

Test Pattern	Boards	24 Hours*	96 Hours*	168 Hours*
IPC B25A	Control	2.23×10^{11}	2.19×10^{10}	2.30×10^{11}
0.0157" Wide Lines	Pattern up	1.63×10^{11}	2.51×10^{11}	9.89×10^{10}
0.0197" Spacing	Pattern down	7.39×10^8	1.03×10^9	1.94×10^9

*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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