

Introduction

3577-TF Wave Solder Flux is a low-solids flux especially formulated to eliminate post-cleaning operations. This flux contains a small amount of resin, which enhances the wetting properties.

3577-TF is activated by a multi-component, synergetic fluxing system, which improves solderability. Any remaining residues after soldering are considered non-corrosive and do not interfere with ATE testing.

Features

- Eliminates the need for cleaning
- Excellent solderability on standard board finishes
- Reduces solder balling
- Compatible with conformal coatings without cleaning
- Meets Bellcore specification TR-NWT-000078
- Meets IPC J-STD-004 specification

Process Recommendations

3577-TF is best applied by spray. Typical preheat temperatures are 93–104°C (200–220°F) topside board temperature at conveyor speeds of 4–6ft/min.

3577-TF can be used very effectively in single or dual wave soldering systems. Assemblies with surface mount components containing lead or mixed-technology can be soldered successfully.

3577-TF can be used successfully with all organic solderability protective (OSP) coatings.

Physical Properties

Teet	Result		
1651	3577-TF	16-3000	
Color	Straw	Clear	
Specific Gravity @25°C (77°F) @15.5°C (60°F)	0.793 0.800	0.783 0.790	
Acid Value	17	None	
Solids Content	4.0	0	
Flash Point (°F TCC)	54	54	
Flux Type J-STD-004	ORLO	N/A	

All information is for reference only.

Not to be used as incoming product specifications.

Packaging

- 5-gallon containers
- 55-gallon drums

Bellcore Surface Insulation Resistance Test

Test Pattern	Board Reading	Final*	
Standard	Control	3.66 x 10 ¹⁰	
Bellcore	Pattern up	5.53 x 10 ¹⁰	
	Pattern down	1.68 x 10 ¹²	

*All readings expressed in Ohms.

Bellcore Electromigration Insulation Resistance Test

Test Pattern	Boards	Initial Reading	Final*
IPC B25	Control	3.10 x 10 ⁹	2.94 x 10 ⁹
	Pattern up	6.18 x 10 ⁹	4.44 x 10 ⁹
	Pattern down	5.46 x 10 ⁹	4.44 x 10 ⁹

*All readings expressed in Ohms.

IPC Surface Insulation

Test Pattern	Boards	24 Hours*	96 Hours*	168 Hours*
IPC B24	Control	1.21 x 10 ¹⁰	1.09 x 10 ¹⁰	1.09 x 10 ¹⁰
	Pattern up	8.21 x 10 ⁹	9.43 x 10 ⁹	9.40 x 10 ⁹
	Pattern down	1.50 x 10 ¹⁰	1.16 x 10 ¹⁰	1.12 x 10 ¹⁰

*All readings expressed in Ohms.



From One Engineer To Another®

PRODUCT DATA SHEET 3577-TF No-Clean Wave Solder Flux

Safety

Flammable liquids should always be stored in a dry, wellventilated environment away from open flames, sparks, or direct heat.

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



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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