

Product Data Sheet

# Wave Solder Flux 3577-TF No-Clean

## 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

## Introduction

**Wave Solder Flux 3577-TF** is a low-solids flux specially 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.

## 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 4-6 ft./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

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

## Packaging

- 5 gallon containers
- 55 gallon drums

## Bellcore Surface Insulation Resistance Test

Test Pattern	Board Reading	Final*
Standard Bellcore	Control	3.66 X 10 <sup>10</sup>
	Pattern up	5.53 X 10 <sup>10</sup>
	Pattern down	1.68 X 10 <sup>12</sup>

\*All readings expressed in ohms

## Bellcore Electromigration Insulation Resistance Test

Test Pattern	Boards	Initial Reading*	Final*
IPC B25	Control	3.10 X 10 <sup>9</sup>	2.94 X 10 <sup>9</sup>
	Pattern up	6.18 X 10 <sup>9</sup>	4.44 X 10 <sup>9</sup>
	Pattern down	5.46 X 10 <sup>9</sup>	4.44 X 10 <sup>9</sup>

\*All readings expressed in ohms

## IPC Surface Insulation Resistance Test

Test Pattern	Board	24 Hours*	96 Hours*	168 Hours*
IPC B24	Control	1.21 X 10 <sup>10</sup>	1.09 X 10 <sup>10</sup>	1.09 X 10 <sup>10</sup>
	Pattern up	8.21 X 10 <sup>9</sup>	9.43 X 10 <sup>9</sup>	9.40 X 10 <sup>9</sup>
	Pattern down	1.50 X 10 <sup>10</sup>	1.16 X 10 <sup>10</sup>	1.12 X 10 <sup>10</sup>

\*All readings expressed in ohms

## Safety

Flammable liquids should always be stored in a dry, well ventilated 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 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.

## Material Safety Data Sheet

The MSDS for this product can be found online at <http://www.indium.com/techlibrary/msds.php>

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