PRODUCT DATA SHEET

OnSpec® Solar-Grade GS-1414

VOC-Free Tabbing Flux

Introduction

Tabbing Flux GS-1414 is a no-clean flux specifically developed for Pb-free solar tabbing/stringing applications. Its water-based, nonflammable formulation dramatically reduces VOC emissions and eliminates special storage requirements. A wide process window provides excellent solderability on difficult-to-solder assemblies.

Features

- Excellent surface wetting
- Eliminates cleaning
- Wide process window
- Use with Pb-free and Sn/Pb

Process Recommendations

Tabbing Flux GS-1414 can be applied via dipping tank. It should not require thinning, however, if thinning is required, use Indium Corporation's 16-3000 flux thinner.

Because **Tabbing Flux GS-1414** is water-based, it does not require frequent acid value monitoring. If thinning is required, deionized should be used.

Tabbing Flux GS-1414 may freeze if exposed to temperatures below 0°C (32°F). If the flux becomes frozen, bring to room temperature then 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)	 1.014 1.014
Acid Value	36
Solids Content	5.76
Flash Point	None
Flux Type Classification (J-STD-004)	ORL0

All information is for reference only.
Not to be used as incoming product specifications.

IPC Surface Insulation Resistance Test

Test Pattern	Board	24 Hours	96 Hours	168 Hours
IPC B24	Control	2.95×10^{13}	2.08×10^{13}	1.56×10^{13}
	Pattern Up	8.93×10^{9}	9.10×10^{9}	6.28×10^{9}
	Pattern Down	1.32×10^{9}	2.71×10^{9}	3.19×10^{9}

All readings expressed in Ohms.

IPC ECM/Telcordia EM Resistance Test

Test Pattern	Board	96 Hours	598 Hours
IPC B25A	Control	9.97×10^{10}	9.03×10^{10}
	Pattern Up	3.88×10^{10}	1.16×10^{11}
	Pattern Down	5.23×10^{9}	3.62×10^{11}

All readings expressed in Ohms.

Telcordia GR-78 Surface Insulation Resistance Test

Test Pattern	Board	Initial Reading	Final Reading
IPC B25A	Control	8.69×10^{12}	1.40×10^{13}
	Pattern Up	3.20×10^{11}	7.02×10^{11}
	Pattern Down	6.75×10^{11}	4.72×10^{11}

All readings expressed in Ohms.

Packaging

- 1 pint evaluation size container: IPN # FLUXGS1414BFWV-84375-1PT
- 1 gallon standard size container: IPN # FLUXGS1414BFWV-84375-1GL
- 5 gallon container
- 5 liter container
- Other packaging available upon request

Technical Support

Indium Corporation sets the industry standard in providing rapid response, onsite technical support for our customers worldwide. Indium Corporation's team of Technical Support Engineers can provide expertise in all aspects of Materials Science.

Safety Data Sheets

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

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.

From One Engineer To Another®

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