

Product Data Sheet

Wave Solder Flux WF-9940

Features

- Superior hole-fill
- Use with Pb-Free and Sn/Pb processes

Introduction

WF-9940 is a highly active no-clean wave solder flux designed for use with through-hole and mixed-technology assemblies. It performs well with both tin/lead and lead-free solders.

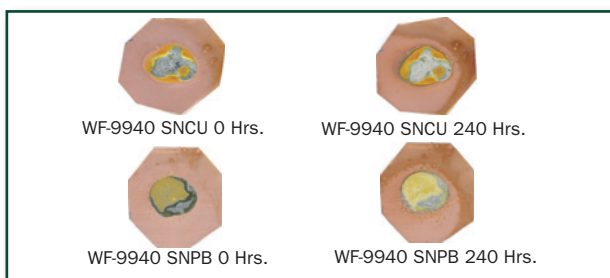
WF-9940 is very heat stable and well-suited for selective soldering applications. Even with the high degree of activation, **WF-9940** passes all known reliability requirements. It is non-corrosive and does not contribute to detrimental circuit board insulation resistance degradation or electrochemical migration.

Process Recommendations

Flux application can be by spray or foam. Spray application provides a more reliable and repeatable method for application. For most Pb-Free processes flux application is from 1000-1250 µg/in² (155-195 µg/cm²) flux solids. Preheat temperature is 200-240°F (93-115°C) topside board temperature. Typical Pb-Free pot temperatures are 500-518°F (260-270°C). Conveyor speed should be adjusted to provide 4-5 second contact time.

Alloy	Flux Deposition Rate µg/in ² solids	Preheat Temp		Preheat Time sec	Contact Time sec	Pot Temp °C
		Top °C	Bottom °C			
Lead-free	1000-1250	90-115	110-135	50-75	4-6	265-270
63Sn/37Pb	500-1000	80-110	100-125	50-75	1.5-3	255-260

Test Data



No green discoloration of the copper after 240 hours of aging

Physical Properties

Test	Result
	WF-9940
Color:	Amber
Specific Gravity: @25°C (77°F)	0.795
@15°C (60°F)	0.804
Acid Value mgKOH/g flux	18.0
mgKOH/g flux solids	496.0
Solids Content	3.63
Flash Point (°F TCC)	54
J-STD-004 Flux Type	ROL1

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

Packaging

- 5 gallon containers
- 55 gallon drums

Safety

All fluxes with low flash points should be handled with caution. Store in a dry, well ventilated area away from sparks, flames, direct heat. Consult Material Safety Data Sheet for full details.

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>

This product data sheet is provided for general information only. It is not intended, described which are sold subject exclusively to written warranties and limitations and shall not be construed, to warrant or guarantee the performance of the products thereon included in product packaging and invoices.

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