

PRODUCT DATA SHEET

# WS-575-SP

## Flip-Chip Flux

### Features

- Water-soluble
- Halogen-free (not intentionally added)
- Suitable for spray applications
- Suitable for SnPb and Pb-free applications
- Non-corrosive to underbump metallization

### Introduction

**Flip-Chip Flux WS-575-SP** is a liquid flux specifically designed to meet process needs for direct chip attach of fine pitch flip-chips (<0.5mm). **WS-575-SP** eliminates compatibility issues with underfills by having a completely water-cleanable residue.

### Properties

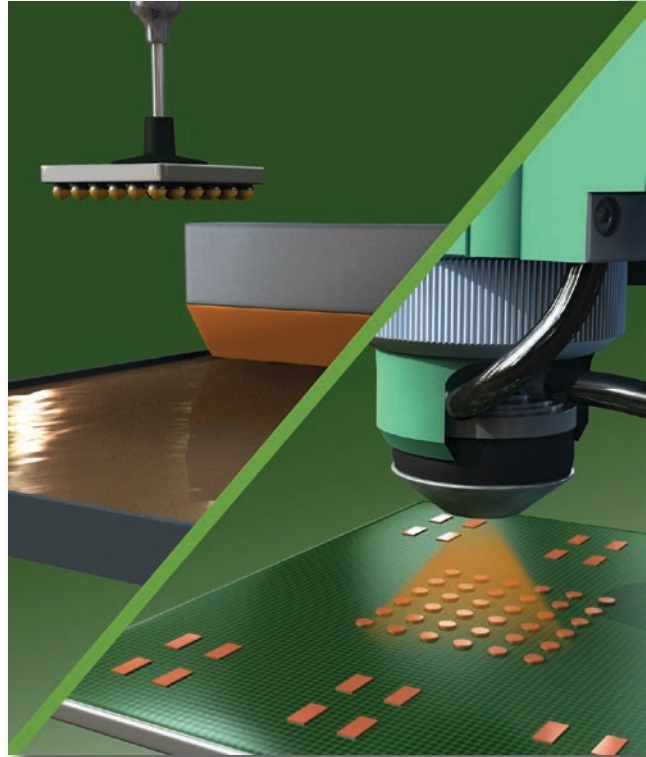
Property	Value	Test Method
Flux Type Classification:	MO	J-STD-004 (IPC-TM-650:
Typical Viscosity:	45cSt	Cannon-Fenske
SIR (Ohms, post cleaning):	Pass (>10 <sup>8</sup> after 7 days @ 85°C & 85% RH)	IPC-B-24
Typical Acid Value:	55mg KOH/g	Titration
Color:	Amber to Brown	Visual
Shelf Life:	1 year	0°C to +30°C

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

### Application

Recommended flux amount: 500-1500micrograms/mm<sup>2</sup>, depending on flip-chip.

For spray applications, the flux storage tank should hold enough flux for one 8-hour shift. Additional flux remaining in tank may expire (pot life <10 hours at room temperature) if left for a prolonged amount of time. Spray equipment should also be cleaned frequently to ensure uniform spray deposition and flux purity.



### Cleaning

The material can be cleaned with DI water, or water with an added cleaner. Ideal conditions for spray-cleaning: 25°C (room temperature) or higher for >1 minute at >60psi.

### Packaging

**WS-575-SP** is available in 100g to 1 gallon (3.8 liter) containers. Other packaging can be provided to meet specific requirements.

OVER→

Form No. 98680 R2

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## Flip-Chip Flux WS-575-SP

### Storage

Storage temperatures should not exceed 25°C for more than 4 days, and should never exceed 30°C. Colder storage (as low as -25°C) can be used to maximize the shelf life. After removing from cold storage, **WS-575-SP** should be allowed to stand for at least 4 hours at room temperature before using.

### Technical Support

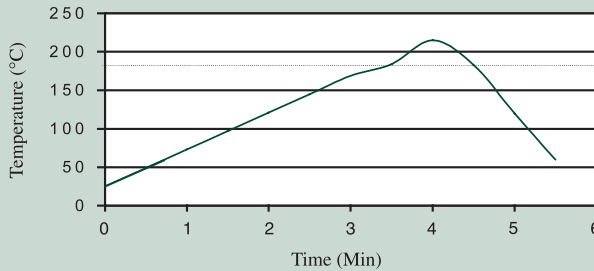
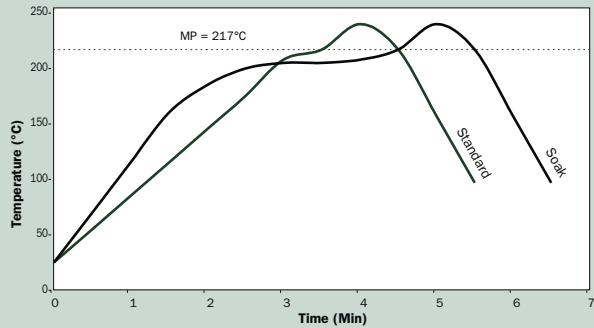
Indium Corporation sets the industry standard in providing rapid response, on-site technical support for our customers worldwide. Indium Corporation's team of Technical Support Engineers can provide expertise in all aspects of Materials Science and Semiconductor Packaging process applications.

### Safety Data Sheets

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

### Reflow

#### Recommended Profile:



Peak reflow temperature should be <340°C in an air or nitrogen atmosphere (<100ppm O<sub>2</sub>), with a linear ramp up to 30°C above liquidus temperature. These profiles are recommended to the user as starting points, and should be optimized by the user to meet their individual process needs.

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