

## PRODUCT DATA SHEET

# PoP Flux 23LV

## Package-on-Package

### Introduction

**PoP Flux 23LV** is a thixotropic no-clean flux designed for package-on-package dipping applications with Pb-free solders. **PoP Flux 23LV** has a rheology designed to be sufficient to hold packages in place before and during reflow, yet allows the correct amount of flux to adhere to the spheres, over an extended pot-life.

### Features

- Rheology optimized for dipping and package-holding
- Holds packages up to 25mm x 25mm in outline
- Long pot life/working life
- Excellent solderability with Cu-OSP and AuNi finishes
- Optimized for Pb-free (SAC alloy) applications
- Clear, non-brittle residue
- Air reflow

### Properties

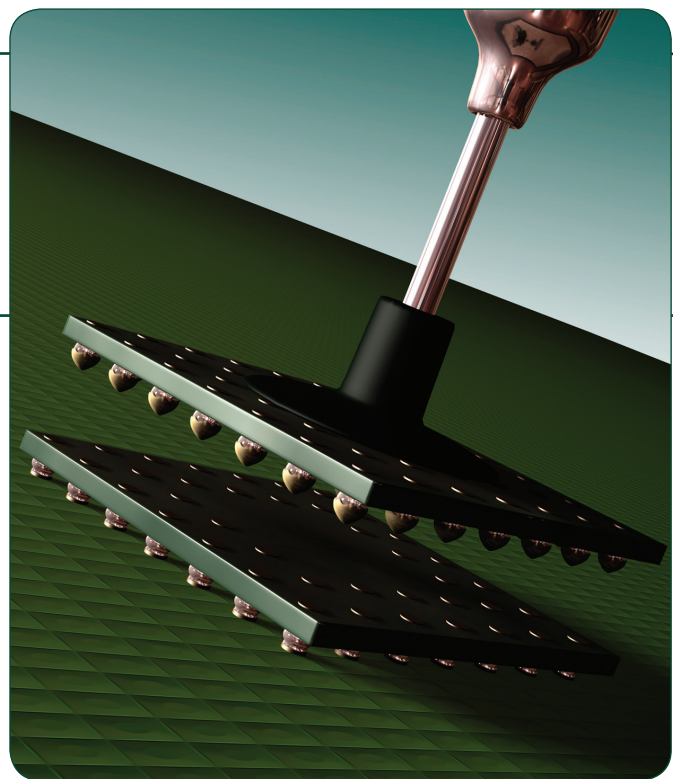
	Value	Test Method
Flux Type Classification	ROL1	J-STD-004 (IPC-TM-650: 2.3.32 and 2.3.33)
Typical Viscosity	250kcps	Brookfield RVT-TF Spindle (5rpm) J-STD-004 (IPC-TM-650)
SIR (Ohms)	Pass (>10 <sup>8</sup> after 7 days @ 85°C and 85% RH)	J-STD-004 (IPC-TM-650: 2.6.3.3 IPC-B-24)
Typical Acid Value	102mg KOH/g	Titration
Typical Tack Strength	240g	J-STD-005 (IPC-TM-650: 2.4.44)
Shelf Life	1 year (0–30°C)	Viscosity change/microscope examination
Color	Amber to light tan	Visual

All information is for reference only.

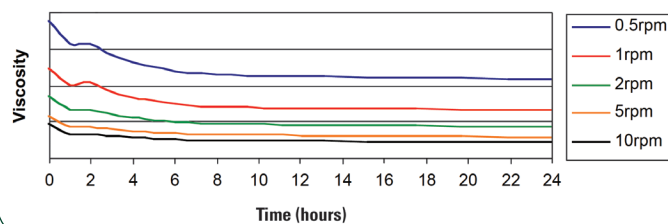
Not to be used as incoming product specifications.

### Application

The volume of flux on the package can be optimized by changing dipping equipment parameters. Key variables include: sphere size, sphere pitch, flux shear speed, dwell, and depth of sphere immersion. Viscosity can be optimized per application by appropriate equipment setup.



Viscosity vs. Shearing Time at Different Shearing Speeds



### Cleaning

**PoP Flux 23LV** is designed for no-clean applications, and can be left in place on the final package. If necessary, flux residues can be removed by using a commercially available flux cleaner.

### Packaging

**PoP Flux 23LV** is available in air-free 30cc syringes. However, other packaging can be provided to meet specific requirements.

From One Engineer To Another®



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### Storage

For maximum shelf life, **PoP Flux 23LV** syringes and cartridges should be stored tip down. Storage temperatures should never exceed 30°C. After removing from cold storage, **PoP Flux 23LV** should be allowed to stand for at least 4 hours at room temperature before using.

### Technical Support

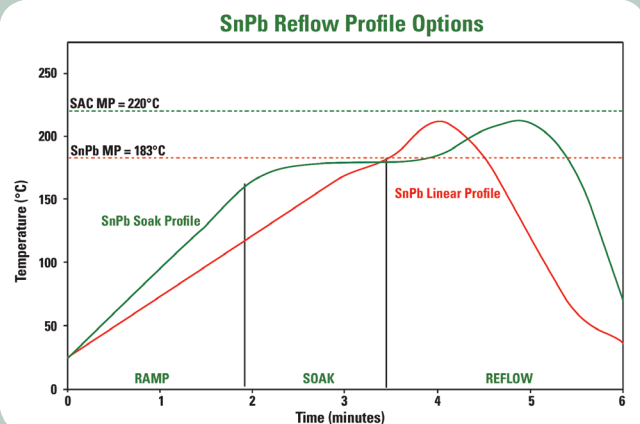
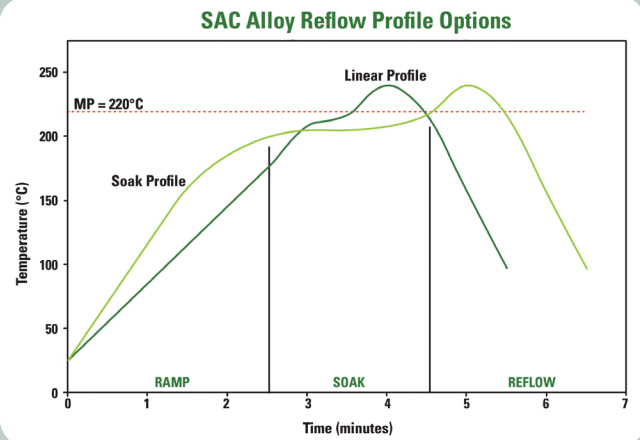
Indium Corporation sets the industry standard in providing rapid response, onsite technical support for our customers worldwide. Indium Corporation's team of Technical Support Engineers can provide expertise in all aspects of Materials Science and Semiconductor Packaging process applications.

### 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 <350°C in an air or nitrogen atmosphere, with a linear ramp up to approximately 30°C above the solidus temperature.

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