

PRODUCT DATA SHEET

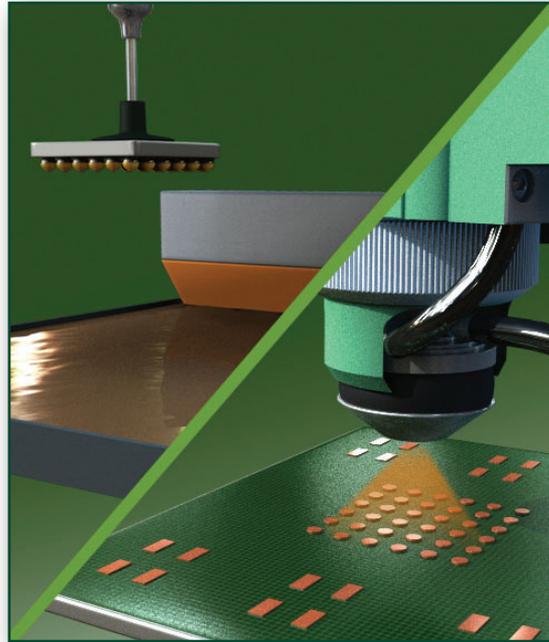
# Flip-Chip Flux NC-826

## Features

- Designed for copper-pillar flip-chip dipping applications
- Tackiness suitable for holding multicore die during assembly
- Compatible with underfills
- No wetting onto die surface
- Dipping with minimal bridging
- Bubble-free airless packaging
- Low residue
- Halogen-free
- No-clean

## Introduction

**Flip-Chip Flux NC-826** is a halogen-free, no-clean flip-chip dipping flux which is designed to leave a completely benign, clear residue. The reduction in residue optimizes underfill adhesion and decreases possible outgassing during underfill cure.



## Properties

Property	Value	Test Method
Flux Type	RELO	J-STD-004 (IPC-TM-650: 2.3.32 and 2.3.33)
Color	Light Yellow	Visual
Typical Viscosity	13kcps	Brookfield DV-1. 51CPE Spindle @20rpm after 5 mins
Typical Acid Value	39mg KOH/g	Titration
SIR (ohms)	Pass	J-STD-004 (IPC-TM-650: 2.6.3.3 IPC-B-24)
Typical Post Reflow Residual Weight	<10%	TGA Data
Working Life	≥ 8 hr	Customer Experience (Dipping)
Shelf Life	6 months when stored at 0 to 30 °C	Viscosity Change/ Microscope Examination

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

## Application

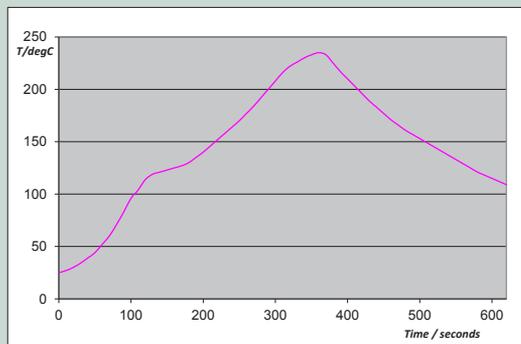
**Flip-Chip Flux NC-826** will have strong adhesion to epoxy-based underfill materials, especially epoxy-amine and epoxy-acid based chemistries. **Flip-Chip Flux NC-826** should also be suitable for use with many epoxy-anhydride systems.

## Cleaning

**Flip-Chip Flux NC-826** is designed for no-clean applications. If necessary, the flux can be removed by using a commercially available flux cleaner. Please contact an Indium Corporation Technical Service Engineer for recommendations of cleaners to suit your process needs.

## Reflow

### Recommended Profile:



**Flip-Chip Flux NC-826** is intended to be used in a nitrogen reflow environment of 100ppm oxygen or less. Some applications can utilize this material in an air environment, although best results will be obtained in an inert atmosphere. **Flip-Chip Flux NC-826** can be used on many surface finishes including immersion Ag, Cu, and AuNi. These surfaces can be soldered with Pb-free alloys, but require nitrogen if reflow temperatures exceed 240 °C.

OVER→

Form No. 99001 (A4) R1

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## Flip-Chip Flux NC-826

### Packaging

**Flip-Chip Flux NC-826** is most commonly available in 10–30g syringes. Other packaging can be provided to meet specific requirements.

### Storage

**Flip-Chip Flux NC-826** syringes and cartridges should be stored tip down for maximum shelf life. **Flip-Chip Flux NC-826** should be allowed to reach ambient temperature before use if stored cold.

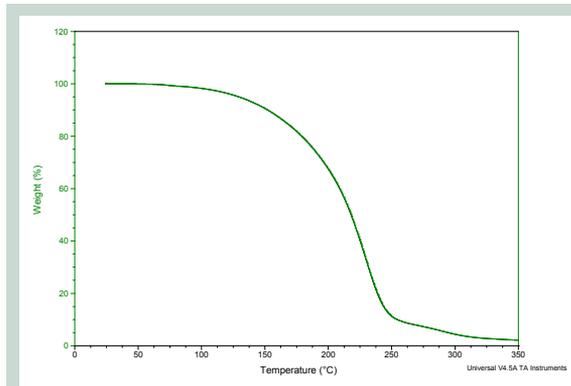
### Technical Support

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>

### Thermogravimetric Analysis (TGA)



TGA was performed at a ramp rate of 10 °C per minute.

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