INDIUM CORPORATION®

PRODUCT DATA SHEET

Flip-Chip Flux NC-26S

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-26S is a halogen-free, no-clean flipchip 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-I. 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

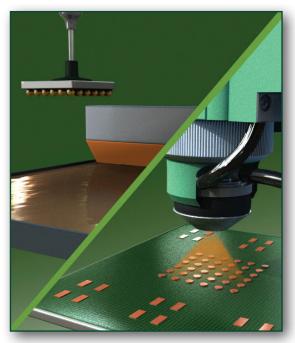
All information is for reference only. Not to be used as incoming product specifications.

Application

Flip-Chip Flux NC-26S will have strong adhesion to epoxy-based underfill materials, especially epoxy-amine and epoxy-acid based chemistries. Flip-Chip Flux NC-26S should also be suitable for use with many epoxy-anhydride systems.

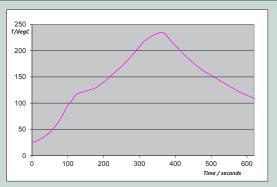
Cleaning

Flip-Chip Flux NC-26S 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-26S 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-26S 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. 99084 (A4) R0

www.indium.com askus@indium.com

ASIA: Singapore, Cheongju, Malaysia: +65 6268 8678 CHINA: Suzhou, Shenzhen: +86 (0)512 628 34900 EUROPE: Milton Keynes, Torino: +44 (0) 1908 580400 USA: Utica, Clinton, Chicago, Rome: +1 315 853 4900





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Packaging

Flip-Chip Flux NC-26S is most commonly available in 10–30g syringes. Other packaging can be provided to meet specific requirements.

Storage

Flip-Chip Flux NC-26S syringes and cartridges should be stored tip down for maximum shelf life. Flip-Chip Flux NC-26S should be allowed to reach ambient temperature before use if stored cold.

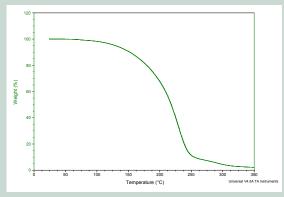
Technical Support

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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