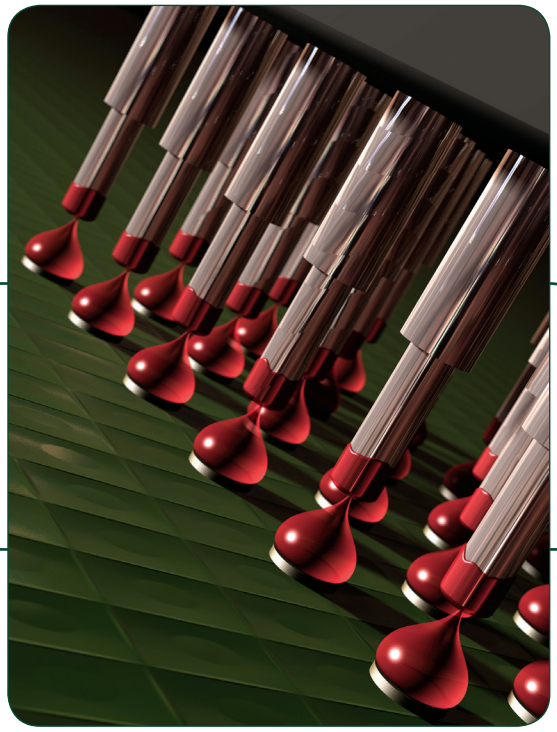
PRODUCT DATA SHEET

NC-585

Ball-Attach Flux

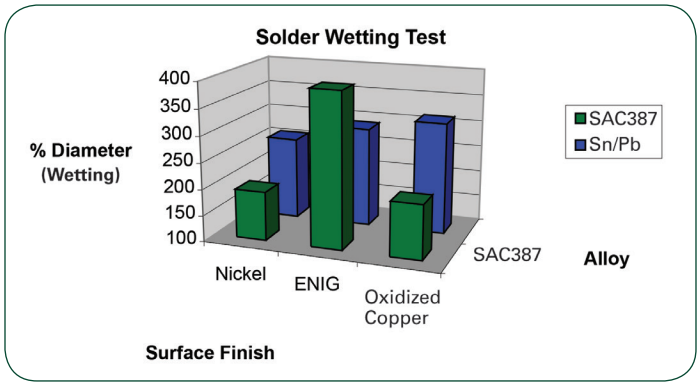


Introduction

Ball-Attach Flux NC-585 is a low-viscosity thixotropic no-clean flux designed for use in ball-attachment to substrates (BGA manufacturing). It is especially useful in applications requiring soldering to surface finishes with tenacious oxides, such as nickel. It can also be used wherever a no-clean ball-attach flux is needed, and is suitable for a variety of different deposition methods.

Features

- Halogen-free, no-clean residue
- Suitable for pin grid array and standard ball grid array applications
- Airless packaging
- Excellent solderability to all common surface metallizations
- No-clean residue
- Can be used for printing, dipping, and pin transfer deposition
- Offers high yields in BGA bumping process
- Suitable for both Pb-free or SnPb applications



Properties

	Value	Test Method
Flux Type Classification	ROL0	J-STD-004 (IPC-TM-650: 2.3.32 and 2.3.33)
Typical Viscosity	8kcps	Brookfield HB DVII^{+}-CP (5rpm)
SIR (Ohms)	Pass (>10^{8} after 7 days @ 85°C and 85% RH)	J-STD-004 (IPC-TM-650: 2.6.33 IPC-B-24)
Typical Acid Value	80mg KOH/g	Titration
Typical Tack Strength	170g	J-STD-005 (IPC-TM.650: 2.4.44)
Shelf Life	0–30°C for 6 months	Viscosity change/ microscope examination
Post Reflow Flux Residue	45%	ICA Test Method

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

Application

Pin transfer volumes can be optimized by changing equipment parameters. Key variables of pin transfer include pin shape, pin diameter, shear speed, dwell, and depth of immersion.

Cleaning

NC-585 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.

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Packaging

NC-585 is available in airless (bubble-free) 30cc syringes. Other packaging can be provided to meet specific requirements.

Storage

NC-585 syringes and cartridges should be stored tip down at 0–30°C for maximum shelf life. After removing from cold storage, **NC-585** should be allowed to stand for a minimum of 4 hours at room temperature before using.

Technical Support

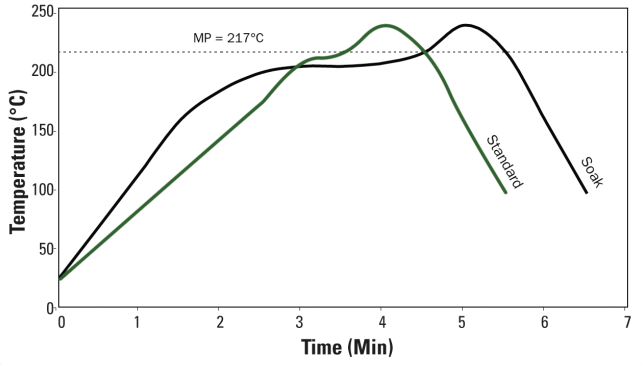
Indium Corporation sets the industry standard in providing rapid response, onsite technical support for our customers worldwide. Indium Corporation's team of Technical Support Engineers can provide expertise in all aspects of Materials Science and Semiconductor Packaging process applications.

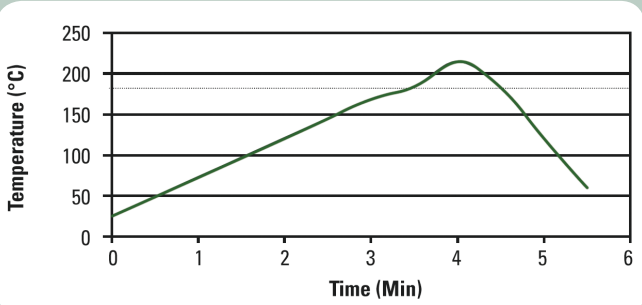
Safety Data Sheets

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

Reflow

Recommended Profile:





Peak reflow temperature should be <260°C in an air or nitrogen atmosphere (<500ppm O_2), 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.

Contact our engineers today: **askus@indium.com**
Learn more: **www.indium.com**

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