

# PRODUCT DATA SHEET

# TACFlux®

## for Board Assembly and Rework

### Introduction

Indium Corporation manufactures a complete line of **TACFlux®**, which includes no-clean, water-wash, and RMA-based fluxes. Its many uses include: rework and repair of various electronics assemblies and components, SMT component attach (including BGAs and flip-chip), BGA ball-attach, preform soldering, and virtually any application where a flux is required. Cycle times are not critical, as **TACFlux®** may sit for hours with no reflow degradation.

### Description

#### **TACFlux®007**

RMA-based fluxes that are compatible with our SMQ®51 series solder paste.

#### **TACFlux®012**

Formulated for alloys containing indium, this flux is compatible with our NC-SMQ®80 solder paste.

#### **TACFlux®014**

Formulated to be fully compatible with NC-SMQ®92 solder paste.

#### **TACFlux®018**

When the final application requires a conformal coat, this flux can be utilized. It is compatible with NC-SMQ®92, and most common conformal coatings adhere to its hard residue.

#### **TACFlux®019**

This water-cleanable product is designed for use with high-temperature alloys. A minimum peak temperature of 250°C is recommended. The flux is compatible with WMA-SMQ®69HT solder paste. The post reflow residue can be easily cleaned with plain DI water combined with spray pressure and elevated temperatures.

#### **TACFlux®020**

Offering easy penetration without clogging crown probes, this flux is recommended for use with our popular NC-SMQ®92J solder paste.

#### **TACFlux®021**

Designed for BiSn low-melting alloys, this flux can be reflowed at a minimum of 170°C. The compatible solder paste is made with NC-SMQ®81.

#### **TACFlux®023**

Specifically designed for Pb-free soldering, this flux can be used with our Pb-free solder paste NC-SMQ®230.

#### **TACFlux®025-NP (Replaces TACFlux®025)**

This is the rework flux for Sn63/Pb37, Pb-free, and high-lead-bearing alloys in an air or inert gas reflow atmosphere. This flux has a shelf life of 3 months when stored at 0–30°C.

### Application Method

**TACFlux®** can be dispensed in dots or lines onto the desired substrate, preform, or BGA sphere. It can also be easily screen printed or stenciled on a desired component footprint.

### Shelf Life and Storage

The shelf life of all **TACFlux®** products listed on this data sheet, except for **TACFlux®025-NP**, is one year when stored at 0–30°C. **TACFlux®025-NP** has a shelf life of 3 months.

### Packaging

**TACFlux®** is available in 10 and 30cc syringes or 100g jars.

**From One Engineer To Another®**



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## Technical Support

Indium Corporation's internationally experienced engineers provide in-depth technical assistance to our customers. Thoroughly knowledgeable in all facets of Material Science as it applies to the electronics and semiconductor sectors, Technical Support Engineers provide expert advice in solder properties, alloy compatibility, and selection of solder preforms, wire, ribbon, and paste. Indium Corporation's Technical Support Engineers provide rapid response to all technical inquiries.

## Safety Data Sheets

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

## Products

| TACFlux <sup>®</sup> | Typical Tackiness (grams) | Typical Viscosity (kcps) | Max Temp (°C) | Reflow Residue (%) | Reliability J-STD-004 | Flux Classification | Cleaning Method                |
|----------------------|---------------------------|--------------------------|---------------|--------------------|-----------------------|---------------------|--------------------------------|
| <b>No-Clean:</b>     |                           |                          |               |                    |                       |                     |                                |
| 007                  | 190                       | 570                      | 310           | 47                 | Pass                  | R0L1                | No-Clean/Semi-Aqueous Solution |
| 012                  | 140                       | 220                      | 250           | 45                 | Pass                  | R0L0                | No-Clean/Semi-Aqueous Solution |
| 014                  | 141                       | 351                      | 250           | 45                 | Pass                  | R0L0                | No-Clean/Semi-Aqueous Solution |
| 018                  | 160                       | 255                      | 250           | 36                 | Pass                  | R0L0                | No-Clean/Semi-Aqueous Solution |
| 020                  | 175                       | 470                      | 250           | 45                 | Pass                  | R0L0                | No-Clean/Semi-Aqueous Solution |
| 021                  | 225                       | 365                      | 230           | 56                 | Pass                  | R0L0                | No-Clean/Semi-Aqueous Solution |
| 023                  | 225                       | 410                      | 300           | 42                 | Pass                  | R0L1                | No-Clean/Semi-Aqueous Solution |
| <b>Water-Wash:</b>   |                           |                          |               |                    |                       |                     |                                |
| 019                  | 175                       | 500                      | 325           | 45                 | Pass                  | ORM0                | Water                          |
| 025-NP               | 800                       | 10*                      | 370           | 47                 | Pass                  | ORM0                | Water                          |

\*Brookfield Cone & Plate (CP51, 5rpm, 5 minutes, 25°C)

All information is for reference only.

Not to be used as incoming product specifications.

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices. All Indium Corporation's products and solutions are designed to be commercially available unless specifically stated otherwise.

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