

PRODUCT DATA SHEET

TACFlux®10-ULR

Flip-Chip Flux

Introduction

TACFlux®10-ULR 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.

Features

- Designed for flip-chip dipping applications
- Suitable for Pb-free alloys
- Ultra-low residue
- Halogen-free
- No-clean

Properties

	Value	
Flux Type	ORLO	J-STD-004 (IPC-TM-650: 2.3.32 and 2.3.33)
Color	Light yellow	Visual
Typical Viscosity	1,475cps	Brookfield DV-I. 40CPE Spindle @ 10rpm after 3 minutes
SIR (Ohms)	Pass	J-STD-004 (IPC-TM-650: 2.6.3.3 IPC-B-24)
Typical Post Reflow Residual Weight	<5%	TGA data
Working Life	≥8 hours	Customer experience (dipping)
Shelf Life	1 year when stored at 0–30°C	Viscosity change/ microscope examination

All information is for reference only.

Not to be used as incoming product specifications.

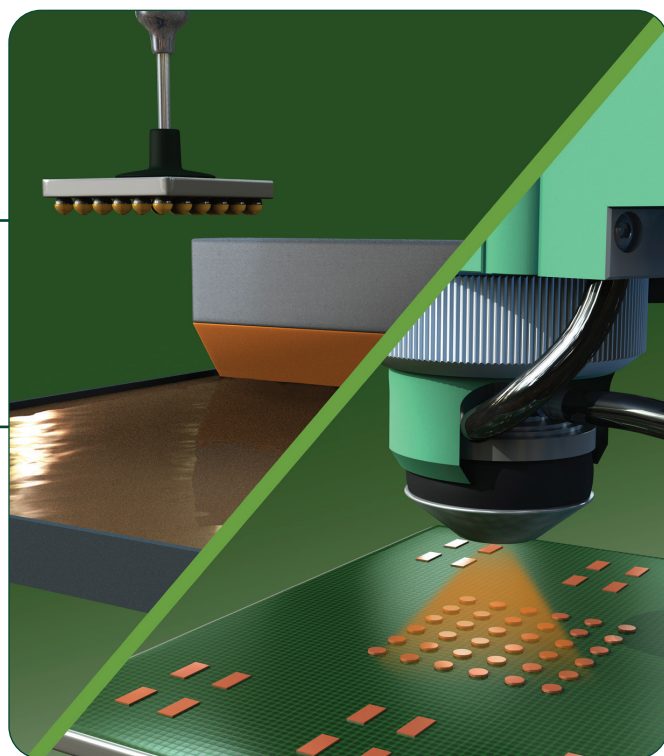
Application

TACFlux®10-ULR will have strong adhesion to epoxy-based underfill materials, especially epoxy-amine and epoxy-acid based chemistries. **TACFlux®10-ULR** should also be suitable for use with many epoxy-anhydride systems.

Cleaning

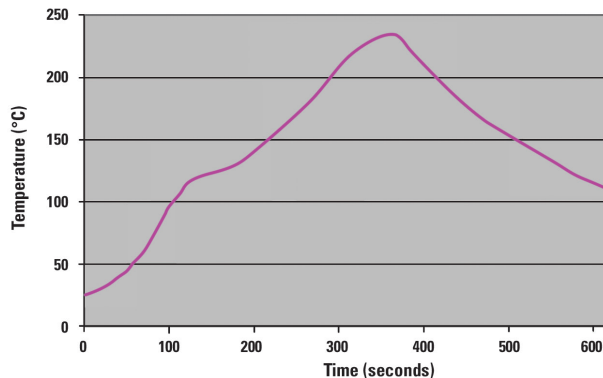
TACFlux®10-ULR is designed for no-clean applications. If necessary, the flux can be removed by using a commercially available flux cleaner. Please contact an Indium Corporation Technical Support Engineer for recommendations of cleaners to suit your process needs.

From One Engineer To Another®



Reflow

Recommended Profile:



TACFlux®10-ULR 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. **TACFlux®10-ULR** 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.



PRODUCT DATA SHEET

TACFlux[®]10-ULR Flip-Chip Flux

Packaging

TACFlux[®]10-ULR is most commonly available in containers from 100g to 3.2kg (1 gallon). Other packaging can be provided to meet specific requirements.

Storage

TACFlux[®]10-ULR containers should be stored at 0 to 30°C for maximum shelf life. **TACFlux[®]10-ULR** should be allowed to reach ambient temperature before use if stored cold.

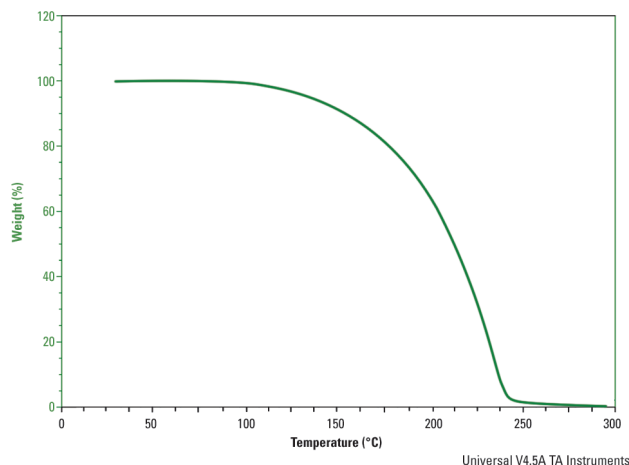
Technical Support

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

Please refer to the SDS document within the product shipment, or contact our local team to receive a copy.

Thermogravimetric Analysis (TGA)



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

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.

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

Contact our engineers: askus@indium.com

Learn more: www.indium.com

ASIA +65 6268 8678 • CHINA +86 (0) 512 628 34900 • EUROPE +44 (0) 1908 580400 • USA +1 315 853 4900



©2021 Indium Corporation