

PRODUCT DATA SHEET

No-Clean Fluxes

For Coating Solder Preforms

Introduction

Indium Corporation's no-clean flux coatings are formulated specifically for solder preforms, combining the latest flux technologies to satisfy the most recent requirements for no-clean and RoHS- and REACH-compliant materials. Flux-coated preforms eliminate the costly production step of separate fluxing and provide a repeatable, precise, and uniform amount of flux every time.

NC-10HF is the newest addition to Indium Corporation's selection of flux coatings for solder preforms. It is halide-free and has excellent wetting.

NC-7 is the most mildly activated of the no-clean flux coating series. It meets all current industry-wide halogen-free and halide-free requirements.

NC-9 contains a small amount of halogen. It provides superior reliability on even the most sensitive electronic assemblies. **NC-9** has activity approaching that of a fully activated rosin flux while maintaining its no-clean status. This enables solder to wet to most standard electronic surface finishes.



Application

Indium Corporation's unique coating process can control the amount of flux to tight tolerances. Flux coatings are measured and applied by weight percentage. The coatings range from 1%–3% and standard tolerances are controlled at $\pm 0.5\%$. Coatings can be applied to most sizes and shapes of preforms.

Cleaning

NC-10HF, **NC-7** and **NC-9** are all designed for no-clean applications. If necessary, the flux residue can be removed by using a commercially available flux cleaner.

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>

Properties

| | NC-10HF | NC-7 | NC-9 |
|----------------------------------|--|------------------------------------|------------------------------------|
| IPC J-STD-004A | ROL0 | ROL0 | ROL1 |
| Presence of Halide Cl-Equivalent | 0.0% | 0.0% | 0.25% |
| Copper Mirror Corrosion | Pass | Pass | Pass |
| SIR, IPC | Pass | Pass | Pass |
| Bellcore Electromigration | Pass | Pass | Pass |
| Soldering Temperature Range | 150° to 350°C | 150° to 350°C | 150° to 350°C |
| Compatible Metals to Solder | Au, Ag, Pd, Pt, Cu, HASL, ENIG, Sn, Ni | Au, Ag, Pd, Pt, Cu, HASL, ENIG, Sn | Au, Ag, Pd, Pt, Cu, HASL, ENIG, Sn |

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