

# NuKlean NCFR & NuKlean NCFR Plus

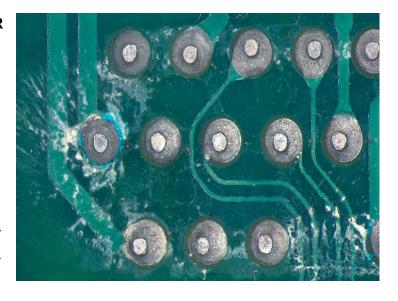
Technical Data Sheet



Cleaning solution for removing No-Clean Fluxes from SMT and BGA circuit boards, connectors and components: Effective at removing fluxes, No-Clean Fluxes, pastes, organic residues, adhesives, greases and oils.

## **Description:**

NuGeneration Technologies' NuKlean NCFR and NCFR Plus products are synergistic mixtures of solvents used to remove No-Clean Flux Residues, fluxes, pastes, organic residues, adhesives, greases and oils from SMT and BGA circuit boards, connectors and components. NuKlean NCFR and NCFR Plus remove polar and ionic activators quickly and effectively, and are excellent white-residue removers. NuKlean NCFR Plus is a more robust formula than NuKlean NCFR, and contains a highly effective, proprietary solvent that cuts through the most tenacious No-Clean Fluxes, however, it does not meet the criteria for CMR compliance according to CLP Regulation 1272/2008. NuKlean NCFR is a CMR compliant formula.



### **Characteristics:**

**NuKlean NCFR** and **NCFR Plus** were formulated to be highly effective at removing No-Clean Fluxes from SMT and BGA circuit boards, connectors and components that can interfere with conformal coating adhesion and durability. **NuKlean NCFR** and **NCFR Plus** are non-flammable and low foaming, so they are able to be used in dip tank, ultrasonic or spray applications, making them both very versatile cleaners.

#### **Directions for Use:**

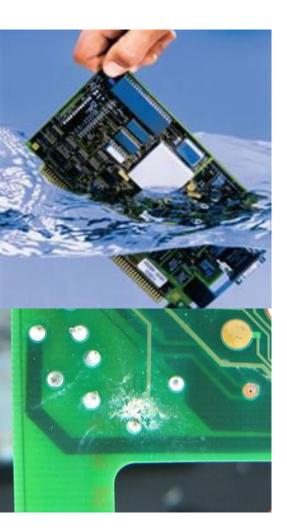
**NuKlean NCFR and NCFR Plus** can be used at 15-50% concentration, depending upon the desired use. If cleaning fluxes, no-clean fluxes, pastes, organic residues, adhesives, greases or oils from SMT and BGA circuit boards, connectors and components, use at 15-50% at 25-60 °C (77-140 °C) for 5 seconds to 5 minutes in dip tank, ultrasonic or spray tank. The parameters can vary due to the type and extent of soils to be removed.

## Product Benefits

- Cleans board surfaces in preparation for conformal coating applications
- Highly effective solution for removing No-Clean Flux Residues, fluxes, pastes, organic residues, adhesives, greases and oils from SMT and BGA boards

## **Physical Properties**





Physical Properties	NuKlean NCFR NCFR Plus
Use concentration (dip tank ultrasonics, spray)	15-50% by volume
Bulk Density	8.4 lbs/gal
Operating Temps	Ambient to 60 °C
Boiling Point	100 °C
рН, @100%	10.2
VOC (Concentrate, NuKlean NCFR) VOC (Concentrate, NuKlean NCFR Plus)	192 g/L 292 g/L
Flash Point	None
Toxic?	No
Leaves Residue?	No
Contains Ionics?	No

**Availability:** 1-gallon, 5-gallon and 55-gallon containers, and 275-gallon totes

**Shipment:** UN2735 Amines, liquid, corrosive, n.o.s., 8, PG III, ERG #153

**Storage:** Keep out of direct sunlight. Keep from freezing. Store between 40  $^{\circ}$  F - 120  $^{\circ}$ F.

**Disposal:** Dispose of in accordance with local, state, and federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-NuGen or email: info@nugentec.com.

**Regulatory:** This product is classified and labeled according to the Globally Harmonized System (GHS).

## 1155 Park Avenue Emeryville, CA 94608

Phone: (888) 99-NuGen Phone: (888) 996-8436 Fax: (707) 891-3012 www.NuGenTec.com info@NuGenTec.com

#### **EMERGENCY OVERVIEW:**

NuKlean NCFR: May cause severe skin burns and eye damage. Harmful if swallowed. NuKlean NCFR Plus: May cause severe skin burns and eye damage. Harmful if swallowed. May damage fertility or the unborn child. **SAFETY:** 

Please make sure you have read and understand the product label and SDS before using this product. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Wash thoroughly after handling. Observe label precautions.