

HIGHLIGHTS

- **Highest activity of 1000 series fluxes**
- **Lowest residues**
- **High resistance against corrosion and electro migration – no clean**

General Description

ELFLUX 1027 NC is a solvent-based, halide-free, organic no clean flux for use in automatic wave soldering. ELFLUX 1027 NC is low in solids and is free from rosin. It is based on very successful ELFLUX 1025 NC, with a further improved activity. The flux leaves practically no residues and cleaning is in general not necessary.

Residues on the boards, if any, are not tacky. Electronic in-circuit-testing is possible without causing any problems. High surface insulation resistance values can be achieved by virtue of the low solid content of ELFLUX 1027 NC.

Areas of Use

General application in surface-mount technology, particularly in the automotive and telecommunication sectors. ELFLUX 1027 NC is effective in case of OSP-treated copper as well as for chemical Sn or electrolytic nickel or silver surfaces.

Classification

ELFLUX 1027 NC is classified as ORLO per DIN EN 61190-1-1 and per IPC ANSI/J-STD-004.

Technical Specification

ELFLUX 1027 NC	
Appearance	Clear, transparent liquid
Smell	Mild alcoholic
Density [g/cm ³] (20 °C)	0.805 ± 0.005
Solids content [%] (per IPC-TM-650 2.3.34)	3.3
VOC content [%]	> 90, Solvent-based
Acid number [mg KOH/gFlux]	29 ± 2
Halides [%]	None
Flash point [°C]	12
Ignition temperature [°C]	399

ELFLUX 1027 NC

Application

ELFLUX 1027 NC can be applied by spraying. Dipping and brush application are possible for simple soldering operations. ELFLUX 1027 NC has been developed for soldering in air and inert gas atmosphere. When selecting the appropriate process parameters it will deliver good results consistently. When setting the process parameters respect the guidelines of the equipment maker and the requirements of the printed circuit boards.

Optimum preheating temperature for most PCB's is 110 – 140 °C as measured at the top side of the PCB.

Process control

When processing the flux in a spray fluxer from a closed system it is normally not required to control the density or acid number of the flux.

Cleaning

Cleaning of the boards: ELFLUX 1027 NC is a no clean flux. Generally, cleaning is not required.

General Safety Precautions

ELFLUX 1027 NC should be used according to industrial standards of practice. For safety advice please refer to the material safety data sheet.

Packing Sizes

ELFLUX 1027 NC is available in containers of 10 L and 20 L.

Storage

ELFLUX 1027 NC is flammable. Store away from sources of ignition. Recommended storage temperature: 5 – 25 °C.

Shelf Life

Under adequate conditions ELFLUX 1027 NC can be stored in original unopened containers for a minimum of 12 months.

The information contained herein is based on technical data that we believe to be reliable and is intended for use by persons having technical skill, at their own risk. Users of our products should make their own tests to determine the suitability of each product for their particular process. TAMURA ELSOLD will assume no liability for results obtained or damages incurred through the application of the data presented.