

## ELFLUX 1002 NC

### General Description

ELFLUX 1002 NC is a solvent-based, halide-free, organic no clean flux for use in automatic wave soldering. ELFLUX 1002 NC is low in solids and is free from rosin.

The residues on the board are not tacky. Electronic in-circuit-testing is possible without causing any problems. The solder joints are low in residues, cleaning is not required. Very high surface insulation resistance values can be achieved by virtue of the low solid content of ELFLUX 1002 NC.

### Areas of Use

General surface-mount technology.

### Classification

ELFLUX 1002 NC is classified as ORLO per DIN EN 61190-1-1 and per IPC ANSI/J-STD-004.

### Technical Specification

	ELFLUX 1002 NC	Verdünner 102
Appearance	Clear, slightly yellow-brownish liquid	Clear, transparent liquid
Smell	Mild alcoholic	Mild alcoholic
Density [g/cm <sup>3</sup> ] (20 °C)	0.796 ± 0.003	0.784 ± 0.003
Solid content [%] (per IPC-TM-650 2.3.34)	2	None
VOC content [%]	> 90, solvent-based	100, solvent-based
Acid number [mg KOH/g Flux]	17 ± 1	< 1
Halides [%]	None	None
pH value (20°C)	5.3	Neutral
Flash point [°C]	12	12
Ignition temperature [°C]	399	399
Recommended thinner	Thinner 102	

### Application

ELFLUX 1002 NC can be applied by foaming or spraying (Ultra-sonic). The flux will provide a uniform head of foam with small air bubbles.

ELFLUX 1002 NC will yield stable and consistently good results, regardless if soldering is done under nitrogen or ambient atmosphere.

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When selecting the appropriate process parameters, please respect the guidelines of the equipment maker and the requirements of the printed circuit board.

The optimum preheating temperature for most PCBs is 110 – 140 °C as measured on the bottom side of the PCB.

### Process Control

Monitoring the solid content is very important, especially in a foam fluxing process, to achieve consistently good soldering results. This can best be done by chemical titration. Auto-density controllers are not exact enough due to water absorption of the flux. When processing the flux in a spray fluxer it is normally not required to control the density or acid number of the flux

### Cleaning

Cleaning of the boards: ELFLUX 1002 NC is a no clean flux. Generally, cleaning is not required.

### General Safety Precautions

ELFLUX 1002 NC should be used according to industrial standards of practice. For safety advice please refer to the material safety data sheet.

### Packing Sizes

ELFLUX 1002 NC is available in containers of 10 L and 20 L.

### Storage

ELFLUX 1002 NC is flammable. Store away from sources of ignition. Storage temperature: 5 – 25 °C.

### Shelf Life

Under adequate conditions ELFLUX 1002 NC can be stored in original unopened containers for a minimum of 12 months.

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