Technical Product Information

ELFLUX 2001S NC Flux for Solar Industries

General Description

ELFLUX 2001S NC is a solvent-based, halide-free, organic no clean flux. ELSOLD 2001S NC is particularly suitable for use in soldering processes of the solar industries and designed for soldering solar modules, joining of silicon cells and strings. ELFLUX 2001S NC is low in solids. It is effective on lead containing as well as on lead-free platings. ELFLUX 2001S NC leaves virtually no residues and no discolouration on the modules.

Following technology steps in the manufacturing process of solar modules are not affected negatively.

Areas of Use

ELFLUX 2001S NC has been developed especially for soldering of strings and connectors to the solar cells. It is equally suitable for lead and lead-free metallic coatings.

Classification

ELFLUX 2001S NC is classified as ORLO per DIN EN 61190-1-1 and per IPC ANSI/J-STD-004.

Technical Specification

	ELFLUX 2001S NC
Appearance	Clear, nearly transparent liquid
Smell	Mild alcoholic
Density [g/cm³] (20 °C)	0.792 ± 0.003
Solids content [%]	1.9
(per IPC-TM-650 2.3.34)	
VOC content [%]	Solvent-based
Acid number [mg KOH/gFlux]	15 ± 2
Halides [%]	Nil
pH value (20 °C)	4
Flash point [°C]	12
Ignition temperature [°C]	399
Recommended thinner	Thinner 201

Application

ELFLUX 2001S NC can be applied by foaming, spraying, brushing or dipping, The activator package used for these fluxes can tolerate higher process temperatures for lead-free soldering without major impact on its performance.

When selecting the appropriate process parameters respect the guidelines of the equipment maker and the requirements of the product to be soldered. Optimum preheat temperatures are in the range of 90 - 150 °C as measured at the top side. However, the thermal stability of 2001S NC flux allows for even higher temperatures without any loss of activity.



Technical Product Information

ELFLUX 2001S NC Flux for Solar Industries

Process Control

No special control is required in case of closed flux control systems. In case of open systems the monitoring and control during use is important for ELFLUX 2001S NC to assure a consistent and uniform flux distribution on the circuit boards. This can be done by density control equipment and best by control of acid number.

Cleaning

ELFLUX 2001S NC is a no clean flux. In general cleaning is not required.

General Safety Precautions

ELFLUX 2001S NC should be used according to industrial standards of practice. For safety advice, please refer to the material safety data sheet.

Packing Sizes

ELFLUX 2001S NC is available in 10 L and 20 L containers.

Storage

ELFLUX 2001S NC is flammable. Store away from sources of ignition. Observe a temperature range of 5-25 °C.

Shelf Life

Under adequate conditions ELFLUX 2001S 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.

