

ELSOLD Soldering Flux 110

General Description

ELSOLD Soldering Flux 110 is a halide-free rosin activated foam flux with an extremely low solid content for automated wave soldering printed circuit boards. The very low amount of residues remaining on the board after soldering does not interfere at all with a subsequent in-circuit testing of the board. Excellent soldering results are achieved despite the low solid content – even for SMD and MELF component boards.

ELSOLD Soldering Flux 110 produces good soldering results. The residuals are non-hygroscopic and insulating.

Areas of Use

ELSOLD Soldering Flux 110 is suitable especially for soldering of circuits with high requirements on product reliability. But it can be used also for other soldering work.

Classification

ELSOLD Soldering Flux 110 corresponds to flux type 1131 according to DIN EN ISO 9454-1. The use of high-quality modified natural rosins and a special mixture of mild organic activators of flux type 1131 suppressing the formation of bridges and studs, guarantee highest soldering quality and a complete absence of any corrosion.

Technical Specification

110	
Appearance	Bright, amber colored liquid
Density [g/cm ³] (20 °C)	0.799 ± 0.005
Acid number [mgKOH/gFlux]	28 ± 3
Solids content [%]	6.2
Flash point [°C]	13
Ignition temperature [°C]	78

If needed isopropanol (water-free) should be used as thinner to remain the characteristic properties.

Application

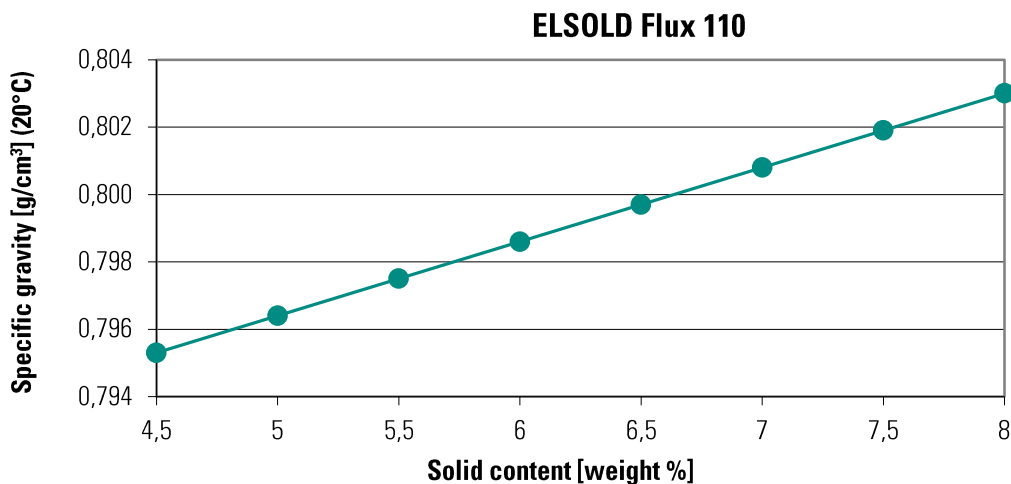
ELSOLD Soldering Flux 110 can be applied by foaming, spraying, brushing, etc. As a consequence of the low solid content it is necessary to increase the pressure of the foam fluxing equipment. Alternatively special foaming pipes and plates can be used. The applied flux dries up very quickly so that the pre-drying section can be run through in a very short time.

Process Control

Due to the evaporation of the solvent the flux gets more concentrated during the use. Experience has shown that fluctuations of the concentration from 5.5 to 7.0 weight % (specific gravity of 0.797 to 0.801 g/cm³) do not negatively affect the soldering results.

ELSOLD Soldering Flux 110

The flux concentration can be controlled by adjusting the specific gravity according to the below diagram. A high-precision densimeter should be used for the measurement and a temperature correction should be made. A more precise determination of the flux concentration is possible by measuring the solid content after evaporation of the solvent in a drying chamber at 80°C. In most cases the correct flux concentration can be maintained by refilling original ELSOLD Soldering Flux 110 and 2-propanol in a 1:1 ratio.



Cleaning

If needed residuals can be easily removed by use of alcohols or commercially available cleaners.

General Safety Precautions

ELSOLD Soldering Flux 110 should be used according to industrial standards of practice. For safety advice please refer to the material safety data sheet.

Packing Sizes

ELSOLD Soldering Flux 110 is available in containers of 5 L, 10 L and 20 L.

Storage

ELSOLD Soldering Flux 110 is flammable and therefore needs to be stored away from possible sources of ignition.

Shelf Life

ELSOLD Soldering Flux 110 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.