# Heraeus

## **Technical Data Sheet**



## VOC-FREE FLUX

#### Description

Surf 300 S/F are low residue, halide-free fluxes, which meet the most demanding legislation on volatile organic compound (VOC) emissions..

### Product Name Surf 300S/F

## VOC-free Liquid Flux

#### Characteristics

Surf 300 S/F offers the following advantages:

- No-clean
- Highly effective on low solderability surfaces, e.g. oxidised copper
- Formulated to minimise solder balling
- Non-flammable formulation <1% VOC meets US air quality legislation

#### Application

Surf 300 S/F are designed mainly for consumer electronics applications using either conventional or nitrogen inerted wave soldering machines. These fluxes perform well, even when used on poorly preserved copper substrate. They have been designed to minimise the effect of solder balling between adjacent pads.

**Wave Soldering**: Excess moisture on the PCB during soldering may lead to random solder balling and poor wetting of some solder joints. IT IS IMPORTANT that the flux solvent carrier (water) is fully evaporated and that the PCB appears virtually dry when it reaches the solder wave.

Solders: Surf 300S/F fluxes can be used with all standard solder alloys.

Physical Properties and Data	
GENERAL PROPERTIES	Surf 300F (foam) Surf 300S (spray)
Colour:	colourless/yellow
Solid Content:	4.4% informative
Halide Content:	zero
Acid value:	37.5 ± 3 mg KOH/g
Specific density at 20°C (68°F):	1.012 ± 0.002 g/cm <sup>3</sup>
Thinner	no thinner required
J-STD-004:	OR LO

Surface Insulation Resistance: Surf 300 S/F liquid fluxes PASS the J STD 004 surface insulation resistance test without cleaning.

#### Shelf Life

2 year after date of delivery (provided proper storage in originally sealed container).

#### Health and Safety

Before using please read the material safety data sheet carefully and observe the safety precautions described.

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#### Notice

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The Surf 300 S/F are manufactured by STANNOL GmbH & Co. KG Haberstr. 24 • 42551 Velbert Doc. release : 16.08.2019

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

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