



STANNOL®

Wenn's ums Löten geht
When it's about soldering
Quand il s'agit du soudage

Technical Data Sheet

STANNOL® liquid flux HW139

Halide-free and VOC-reduced no-clean flux classified as type 2.2.3.A according to DIN-EN 29454-1 (DIN 8511, F-SW23).

- **good wetting, and through hole-filling**
- **no visible residues, no corrosion, no electromigration**
- **high surface insulation resistance**
- **pin testable**
- **application with spray and foam fluxers**

Description

The **STANNOL® HW139** contains a solvent mixture of alcohol and pure, deionised water, a contribution to current environmental developments. The European VOC-standards being currently valid demand a reduction of the emission of organic substances into the environment. A VOC-reduced flux should be used when a VOC-free flux is unsuitable due to the application conditions.

The changeover to the VOC-reduced **STANNOL® HW139** is also possible when new lead-free production processes are to be introduced. The higher temperature in the preheat-zone and the higher temperature of the solder wave facilitate the application of a completely or partially water based liquid flux as an appropriate alternative for environmental protection.

The **STANNOL® HW139** fulfils all the requirements on a modern no-clean flux for the wave-soldering process:

Application

The **STANNOL® HW139** has been developed for applications with foam and **spray fluxers**.

The preheat temperature should be between 105 and 135° C measured on the component side of the printed circuit board. The increased preheat temperature is necessary due to the higher evaporation energy of the water. In addition the activation of the flux is optimised within this temperature range and the preheating of the components can be guaranteed.

Physical Properties and Data

Colour:	colourless
Density at (20° C):	0.914g/cm ³
Solid content:	2.5 %
Acid rating:	21.0 mg KOH/g
Halide content:	none
Flash point (closed crucible):	24°C
Ignition temperature:	none
Thinner:	generally not required with spray flux systems
Storage conditions:	optimum 10° C to max. 30° C

Shelf life

2 years 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.

The above values are typical and represent no form of specification. The Data Sheet serves for information purposes. Any verbal or written advise is not binding for the company, whether such information originates from the company offices or from a sales representative. This is also in respect of any protection rights of third parties, and does not release the customer from the responsibility of verifying the products of the company for suitability of use for the intended process or purpose. Should any liability on the part of the company arise, the company will only indemnify for loss or damage to the same extent as for defects in quality.