# **Technical Information**



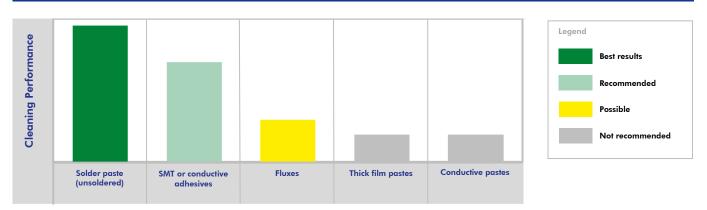


Stencil PH-neutral

Water-based stencil cleaner for the removal of solder pastes and SMT adhesives

HYDRON<sup>®</sup> SC 300 is a water-based, single-phase cleaning agent for SMT stencils. The cleaning agent reliably removes solder pastes and SMT adhesives at room temperature and does not leave any adhesive pigment residues on the surface. HYDRON<sup>®</sup> SC 300 is recommended for cleaning and rinsing and dries residue-free. In addition, the product can be used for stencil underside wiping in SMT printers.

# Areas of application – Stencil & misprinted board cleaning



## Advantages compared to other cleaners

- Excellent cleaning performance on solder pastes and SMT adhesives, does not leave any pigment residues.
- Recommended for cleaning and rinsing.
- Residue-free drying, does not leave any streaks on stencils.
- No foaming in spray-in-air systems, neither in the cleaning nor in the rinsing section, can also be used with water rinsing.
- VOC content < 20 %, therefore no subject to approval.</li>
- Excellent material compatibility with stencils.
- Water-based cleaner without flash point, no explosion-proof protection required.
- HYDRON<sup>®</sup> SC 300 has been approved by leading international manufacturers for the use in their stencil printers. Written approvals can be obtained from ZESTRON.

# **Process Steps**

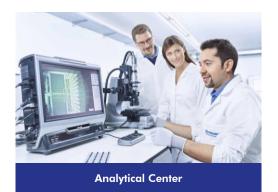
| Cleaning Process | 1. Cleaning                | 2. Rinsing                            | 3. Drying                     |
|------------------|----------------------------|---------------------------------------|-------------------------------|
| Spray-in-air     | HYDRON® SC 300             | HYDRON® SC 300,<br>water or DI-water* | Hot air or<br>circulating air |
| Ultrasonic       | HYDRON <sup>®</sup> SC 300 | HYDRON® SC 300,<br>water or DI-water* | Hot air or<br>circulating air |
| SMT printer      | HYDRON <sup>®</sup> SC 300 | not applicable                        | Paper + vacuum drying         |

\* Depending on the water hardness, rinsing with regular water might be sufficient for stencil cleaning. In the case of high water hardness, lime marks may stay behind. For misprint cleaning, rinsing with DI-water is highly recommended.



## Independent Test Center - Largest choice of leading machines, chemistry & analytics





Visit our Machine Test Center and clean your stencils & screens under production conditions in cleaning machines of leading international equipment suppliers. Our process engineers will help you independently of any supplier to find the most suitable combination of equipment & cleaning agent for your requirements. Following the cleaning trials, all results will be reviewed immediately in our Analytical Center to verify the required cleanliness.

Contact ZESTRON's process engineers for cleaning trials:

Europe: Phone +49 (841) 63526; <u>techsupport@zestron.com</u> / South Asia: Phone +604 (3996) 100; <u>support@zestronasia.com</u> **Or visit our website for a virtual tour:** <u>http://www.zestron.com/en/company/virtual-company-tour.html</u>

## **Technical Data\***

| Density                                | (g/ccm) at 20°C/68°F           | 0.99                 |
|--|--------------------------------|----------------------|
| Surface tension                        | (mN/m) at 25°C/77°F            | 26.7                 |
| Boiling range                          | °C/°F                          | 98 - 229 / 208 - 444 |
| Flash point                            | °C/°F                          | None until boiling   |
| pH value                               | 10g/l H2O                      | Neutral              |
| Vapor pressure                         | (mbar) at 20°C/68°F            | approx. 20           |
| Solubility in water                    |                                | Soluble              |
| Cleaning temperature                   | °C/°F                          | 20 – 50 / 68 – 122   |
| Application concentration              | Ready-to-use                   | Pure                 |
| Application concentration <sup>1</sup> | Concentrate                    | 20%                  |
| HMIS Rating                            | Health-Flammability-Reactivity | 0 - 0 - 0            |

\* HYDRON® SC 300 is available as concentrate or ready-to-use-solution. The following represents a ready-to-use-mixture.

 $^1\ {\rm HYDRON}^{\rm @}\ {\rm SC}\ {\rm 300}$  is recommended to be diluted in DI-water.

# **Product Features & Cleaning Standards**

| RoHS<br>WEEE    | 100% compliance with EU guidelines<br>(RoHS 1, 2 & 3, WEEE)                   | Stencils cleaned with HYDRON® SC 300 in a ZESTRON specified process meet the following industry standards: |
|-----------------|---|--|
| PB<br>Inst-free | Extensively tested and suitable for cleaning lead-free solder pastes          | <ul> <li>IPC-7526 Manual for cleaning of stencils and misprinted boards</li> </ul>                         |
| HYDRON          | HYDRON® Technology offers single-phase formulations and a good processability |  |
| Reach           | Product is free of any critical substances according to SIN & SVHC lists      |  |



## Environmental, health & safety regulations

HYDRON<sup>®</sup> SC 300 is water-based and biodegradable.

- Rinsing with water is not necessary. This results in the elimination of water streams and water treatment processes.
- The cleaning agent is formulated free of any halogenated compounds.
- Refer to the SDS for specific handling precautions and instructions.
- HYDRON<sup>®</sup> SC 300 is a non-hazardous material and according to EU standards does not require specific labelling.

## Availability & Storage

| 1 Liter   | ✓ |  |
|-----------|---|--|
| 5 Liter   | ~ |  |
| 25 Liter  | ✓ |  |
| 200 Liter | ✓ |  |

- Available as concentrate and ready-to-use solution
- Store HYDRON<sup>®</sup> SC 300 in the original container at a temperature between 5 30°C / 41 86°F.
- The product has a minimum shelf life of 5 years in factory sealed containers.



## Further product information

- Material Compatibility Please review the Material Compatibility overview before using the cleaning agent.
- HYDRON<sup>®</sup> Technology Sheet Detailed information on HYDRON<sup>®</sup> Technology.
- Filter recommendation
   To take full advantage of HYDRON® Technology and further extend the bath life of HYDRON® SC 300,
   filtration is recommended.
- Safety data sheet

## **Available Process-Optimization-Products**

To ensure a stable running cleaning process, it is important to monitor cleaning agent concentration and regular bath treatment. For HYDRON<sup>®</sup> SC 300 the following process support product is available:



#### **Concentration measurement:**

ZESTRON<sup>®</sup> Bath Analyzer 20, a manual test method for fast and reliable checks on cleaner concentration.