Technical Information







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

VIGON[®] SC 210 is a water-based cleaning agent specifically developed for SMT stencils. Based on the MPC[®] Technology, the cleaning agent reliably removes solder paste and SMT adhesives in a single process and provides optimal cleaning results even at low temperatures starting from 18°C/64°F. VIGON[®] SC 210 is designed to be used in either spray-in-air or ultrasonic cleaning equipment. Depending on the flux type, it can also be used for misprint cleaning. In addition, VIGON[®] SC 210 can be used to remove adhesives from tools (particularly dispensing needles).

Area of application – Stencils, Misprints & Tools



Advantages compared to other cleaners

- VIGON[®] SC 210 shows constantly good cleaning results at temperatures between 18-40°C/64-104°F.
- The cleaning agent is water-based, surfactant-free and does not leave residue on substrates or inside the cleaning equipment.
- VIGON[®] SC 210 shows excellent material compatibility with SMT stencils.
- The cleaning agent has no flash point and thus can be applied without explosion-proof protection.
- VOC value significantly below 20%, easy compliance with local regulations on VOC emissions.
- Non-foaming, low-odor, no build-up of organics in the rinsing section.
- Can also be used to remove adhesives from tools, especially from dispensing needles.

Process Steps

Cleaning process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air	Stencils	VIGON [®] SC 210	VIGON [®] SC 210, Water* or DI-Water	Hot, compressed or circulating air
Ultrasonic	Stencils	VIGON [®] SC 210	VIGON [®] SC 210, Water* or DI-Water	Hot, compressed or circulating air
Ultrasonic	Tools, Dispensing Needles	VIGON® SC 210, 100% concentrate	VIGON® SC 210, Water or DI-Water	Hot, compressed or circulating air

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



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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:** http://www.zestron.com/en/company/virtual-company-tour.html

Technical Data*

Density	(g/ccm) at 20°C	0.95
Surface tension	(mN/m) at 25°C	28.5
Boiling range	°C/ °F	98 - 229 / 208 - 444
Flash point	°C/ °F	None until boiling
pH-value	10g/l H ₂ O	Neutral
Vapor pressure	(mbar) at 20°C/ 68°F	Approx. 20
Solubility in water		Soluble
Cleaning temperature	°C/ °F	18 – 40 / 64 - 104
Application concentration - stencils ¹	Concentrate	15 - 20 %
Application concentration - stencils	Ready-to-use	Pure
Application concentration - tools	Concentrate	100 %
HMIS Rating	Health-Flammability-Reactivity	0 - 0 - 0

* VIGON® SC 210 is available as concentrate or ready-to-use solution. The following information represents a ready-to-use-mixture. ¹ VIGON® SC 210 is recommended to be diluted with DI-water only.

Product Features & Cleaning Standards

RoHS WEEE complicant	100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)	Stencils cleaned with VIGON® SC 210 in a ZESTRON specified process meet the following industry standards:
PB Ind for	Extensively tested and suitable for cleaning lead-free solder pastes	 IPC-7526 Manual for cleaning of stencils and misprinted boards
	MPC® Technology ensures an extremely long bath life when used in a closed loop system	
Reach	Product is free of any critical substances according to SIN & SVHC lists	



Environmental, health & safety regulations

- VIGON[®] SC 210 is water-based and biodegradable.
- Water rinsing 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.
- VIGON[®] SC 210 is a non-hazardous material and according to EU standards does not require specific labelling.
- Refer to the SDS for specific handling precautions and instructions.

Availability & Storage

1 Liter	~	
5 Liter	~	
25 Liter	~	
200 Liter	~	

- Available as concentrate and ready-to-use solution.
- Store VIGON[®] SC 210 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.
- MPC[®] Technology Sheet Detailed information on MPC[®] Technology.
- Filter recommendation
 To take full advantage of MPC[®] Technology and further extend the bath life of VIGON[®] SC 210, 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 VIGON[®] SC 210 a variety of process support products are available:



Concentration measurement:

- ZESTRON® EYE for automated real-time concentration monitoring providing 100% traceability.
- ZESTRON[®] Bath Analyzer 20, a manual test method for fast and reliable checks on cleaner concentration.