

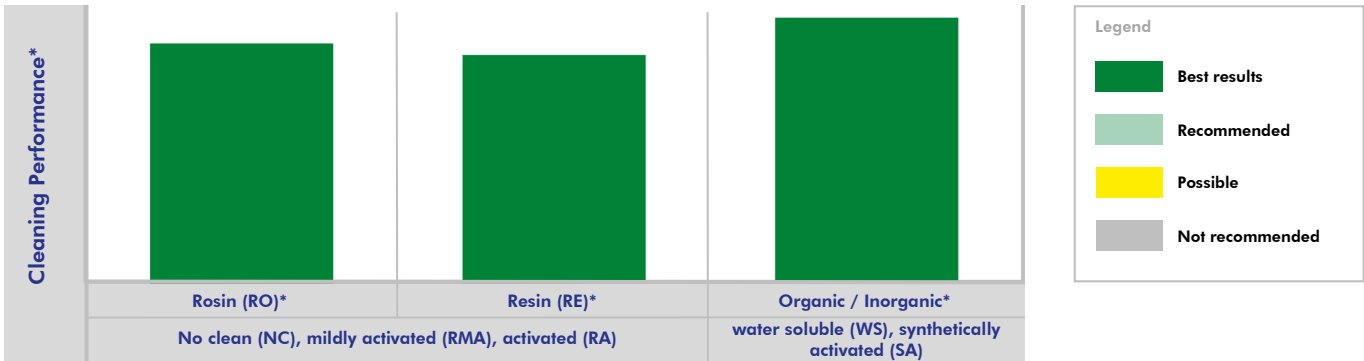
VIGON® N 680



Water-based, pH-neutral defluxing agent for spray-in-air cleaning processes

VIGON® N 680 is a water-based, pH neutral MPC® cleaning agent specifically developed for the use in spray-in-air inline and batch equipment. VIGON® N 680 removes a broad range of electronic assembly flux residues with an exceptional ability to penetrate and clean under low standoff components. Additionally, the cleaning agent provides excellent material compatibility, particularly with sensitive metals such as copper.

Areas of application – PCBA Defluxing



* J-STD-004

Advantages compared to other cleaners

- Exceptional cleaning performance, specifically targeting low standoff component cleanliness.
- Easily rinsed yielding a wide process window.
- Excellent material compatibility with sensitive materials including copper and aluminum due to its pH neutral formulation.
- Performs well at low application concentrations in specific processes.
- Eco-friendly formulation eliminates the need for waste water neutralization

Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air (inline & batch)	PCBAs	VIGON® N 680	DI-water	Hot air or circulating air

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Machine Test Center



Analytical Center

Visit our Machine Test Center and clean your electronic assemblies in cleaning machines of leading international equipment suppliers.

Your benefits:

- You are introduced to the cleaning machines & you clean your PCBAs under production conditions supported by your ZESTRON process engineer
- You check the cleaning results immediately on site (ROSE, optionally IR, IC, SEM/EDX etc.) for maximum comparability & result transparency
- You receive a process guarantee including detailed process parameters for the machine/cleaner combination that we recommend

Contact ZESTRON's process engineers for cleaning trials:

Europe: +49 8453 41995 318; techsupport@zestron.com / South Asia: +604 (3996) 100; support@zestronasia.com

Technical Data*

Density	(g/ccm) at 20°C/68°F	1.00
Surface tension	(mN/m) at 25°C/77°F	31.2
Boiling point	°C/°F	> 98°C / 208°F
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
Cleaning temperature	°C/°F	40 - 70°C / 104 - 158°F
Solubility in water		Soluble
Application concentration ¹ (inline)	Concentrate	7.5 - 15 %
Application concentration ¹ (batch)	Concentrate	10 - 20 %
HMIS Rating	Health-Flammability-Reactivity	1 - 0 - 0

* Please note that the following information represents VIGON® N 680 at 10 % concentration.

¹ The concentrate of VIGON® N 680 has to be diluted in DI-water.

Product Features & Cleaning Standards

	100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)	<p>Electronic assemblies cleaned with VIGON® N 680 in a ZESTRON specified process meet the following industry standards:</p> <ul style="list-style-type: none"> ■ IPC-A-610 Visual cleanliness ■ J-STD 001 Ionic and resin cleanliness and foreign object debris ■ IPC 5704 Cleanliness requirements for bare boards ■ IPC-Hdbk-65B Guidelines for cleaning of printed boards and assemblies
	Extensively tested and suitable for cleaning lead-free solder pastes	
	MPC® Technology ensures an extremely long bath life when used in a closed loop system	
	Product is free of any critical substances according to SIN & SVHC lists	
<p>A cleaning process using VIGON® N 680 can help to reduce particle contamination.</p>		

Environmental, health & safety regulations

- VIGON® N 680 is water-based and biodegradable.
- VIGON® N 680 is formulated free of any halogenated compounds.
- Refer to the SDS for specific handling precautions and instructions.

Availability & Storage

1 Liter	✓
5 Liter	✓
25 Liter	✓
200 Liter	✓

- Available as concentrate
- Store VIGON® N 680 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® N 680, 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® N 680 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.