

## VIGON® N 680

**Aqueous-based, pH neutral defluxing agent for spray-in-air low-standoff applications**



VIGON® N 680, based on the MPC® Technology (Micro Phase Cleaning), is an aqueous-based, pH neutral 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: PCB Defluxing

Recommended Solder Paste Applications:	Additional Product Information
No Clean (NC)	Material Compatibility Overview
Water Soluble (WS)	
Rosin (R)	MPC® Technology Sheet
Rosin Mildly Activated (RMA)	
Rosin Activated (RA)	Safety Data Sheet

Applies to leaded and lead-free solder pastes and liquid fluxes

### Key Benefits

- 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)	PCBs	VIGON® N 680	DI-water	Hot air or circulating air

Please refer to the Material Compatibility Overview prior to cleaning plastics.

## Technical Data: VIGON® N 680 at 10% Concentration

Density	(g/cm <sup>3</sup> ) at 20°C/68°F	1.00
Surface tension	(mN/m) at 25°C/77°F	31.2
Boiling point	°C/°F	> 98 / > 208
Flash point	°C/°F	None
pH value	10g/l H <sub>2</sub> O	Neutral
Vapor pressure	(mbar) at 20°C/68°F	Approx. 20
Cleaning temperature	°C/°F	40 – 70 / 104 - 158
Solubility in water		Soluble
Application concentration <sup>1</sup> (inline)	Concentrate	7.5-15%
Application concentration <sup>1</sup> (batch)	Concentrate	10-20%
HMIS Rating	Health-Flammability-Reactivity	1 - 0 - 0

<sup>1</sup> VIGON® N 680 is recommended to be diluted in DI-water

## Product Features & Cleaning Standards



MPC® Technology ensures an extremely long bath life when used in a closed loop system



Extensively tested and suitable for cleaning of lead-free solder pastes



100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)



Product is free of any critical substances according to SIN & SVHC lists

## Environmental, Health & Safety Regulations

- Biodegradable and environmentally-friendly material.
- Compliant with the latest ODS regulations and does not contain HAPs.
- 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.



## Process Optimization



To ensure a stable running cleaning process, it is important to monitor cleaning agent concentration. For VIGON® N 680 the following process support product is available:

### Concentration measurement:



- ZESTRON® EYE concentration monitoring systems accurately and automatically measure the cleaning agent concentration.
- ZESTRON® Bath Analyzer 20 is a manual test method for fast and reliable checks of cleaning agent concentration.

Contact ZESTRON's Application Engineering Team for more information or trials:  
 Phone: +1 (703) 393-9880 Email: [infousa@zestron.com](mailto:infousa@zestron.com)