

## VIGON® PE 193A

Alkaline defluxing agent for PCBs and Power Electronics



VIGON® PE 193A, based on the MPC® Technology (Micro Phase Cleaning), is an aqueous-based, alkaline cleaning agent specifically developed for the use in spray-in-air equipment. VIGON® PE 193A removes flux residues from PCBs as well as power electronics including leadframes, discrete devices, power modules, and power LEDs. The cleaning agent provides exceptional results removing oxidation and stains from copper surfaces while ensuring material compatibility in preparation for subsequent processes such as wire/adhesive bonding and molding.

### Areas of Application: PCB and Power Electronics 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

- Excellent defluxing performance for PCBs and power electronics with low-standoff components.
- Exceptional cleanliness results with heavily oxidized and stained Cu surfaces.
- Retains activated copper surfaces over an extended period of time without risk of reoxidation.
- Broad material compatibility with sensitive metals and dies.
- No flash point, thus applicable in all non-explosion proof spray-in-air equipment.

### Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air (inline & batch)	PCB & Power Electronics	VIGON® PE 193A	DI-water <sup>1</sup>	Hot air or circulating air
Spray-Under-Immersion (Ultrasonic & Dip Tank)	PCB & Power Electronics	VIGON® PE 193A	DI-water <sup>1</sup>	Hot air or circulating air

<sup>1</sup> For cleaning Power Electronics, the DI-water temperature should be between 20-40°C/68-104°F.

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

## Technical Data: VIGON® PE 193A at 15% Concentration

Density	(g/cm <sup>3</sup> ) at 20°C/68°F	0.99
Surface tension	(mN/m) at 25°C/77°F	29.6
Boiling point	°C/°F	> 98 / > 208
Flash point	°C/°F	None until boiling
pH value	10g/l H <sub>2</sub> O	10.3
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>	Concentrate	10-25%
HMS Rating	Health-Flammability-Reactivity	1 - 0 - 0

<sup>1</sup> VIGON® PE 193A 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

- Water-based and biodegradable.
- 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	✓

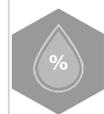
- Available as concentrate
- Store VIGON® PE 193A in the original container at a temperature between 5 - 30°C / 41 - 86°F.
- The product has a minimum shelf life of 5 years in factory sealed containers.



## Process Optimization



To ensure a stable running cleaning process, it is important to monitor cleaning agent concentration. For VIGON® PE 193A the following process support products are available:



### Concentration measurement:

- ZESTRON® EYE concentration monitoring systems accurately and automatically measure the cleaning agent concentration.
- ZESTRON® Bath Analyzer 10 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:  
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