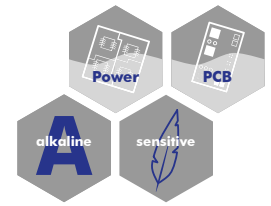


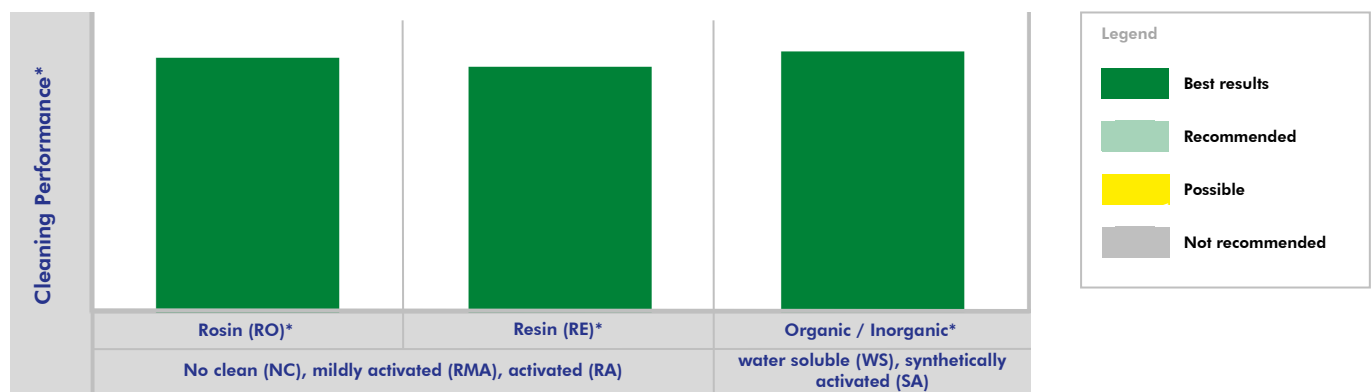
VIGON® PE 194A

Mild alkaline defluxing agent for Power Electronics and PCBAs



VIGON® PE 194A is a water-based, mild alkaline cleaning agent specifically developed for the use in spray-in-air and dip tank equipment. Based on the MPC®-Technology, VIGON® PE 194A reliably removes flux residues from power modules, leadframes, discrete devices, power LEDs as well as PCBAs. The cleaning agent provides an optimal combination of very good material compatibility with sensitive metals, specifically with dies on one side, and Cu deoxidation within a short time on the other side.

Areas of application – Defluxing of Power Electronics & PCBAs



* J-STD-004

Advantages compared to other cleaners

- Excellent defluxing performance for Power Electronics and PCBAs.
- Very good material compatibility due to mild alkaline formulation, specifically with dies and sensitive metals.
- Provides stain-free, activated copper surfaces within a short time and therefore optimal conditions for subsequent processes such as wire bonding, moulding or adhesive bonding.
- Formulated for effective rinsing, no foaming and suitable for spray-in-air as well as dip tank processes.
- No flash point, thus applicable in all spray-in-air equipment without explosion proof

Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air (inline & batch)	Power Electronics & PCBAs	VIGON® PE 194A	DI-water ¹	Hot air or circulating air
Dip tank (US / SUI)	Power Electronics & PCBAs	VIGON® PE 194A	DI-water ¹	Hot air or circulating air

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

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Machine Test Center



Analytical Center

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

Your benefits:

- You are introduced to the cleaning machines & you clean your power electronics 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	0.99
Surface tension	(mN/m) at 25°C/77°F	28.9
Boiling point	°C/°F	> 98°C / > 208°F
Flash point	°C/°F	None until boiling
pH value	10g/l H ₂ O	9.0
Vapor pressure	(mbar) at 20°C/68°F	Approx. 20
Cleaning temperature	°C/°F	40 - 70°C / 104 - 158°F
Solubility in water		Miscible
Application concentration ¹ (inline)	Concentrate	10 - 20 %
Application concentration ¹ (batch)	Concentrate	15 - 25 %

* Please note that the following information represents VIGON® PE 194A at 15 % concentration.

¹ The concentrate of VIGON® PE 194A has to be diluted in DI-water.

Product Features & Cleaning Standards

 <p>100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)</p>	<p>Electronic assemblies cleaned with VIGON® PE 194A 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 <p>A cleaning process using VIGON® PE 194A can help to reduce particle contamination.</p>
 <p>Extensively tested and suitable for cleaning lead-free solder pastes</p>	
 <p>MPC® Technology ensures an extremely long bath life when used in a closed loop system</p>	
 <p>Product is free of any critical substances according to SIN & SVHC lists</p>	

Environmental, health & safety regulations

- VIGON® PE 194A is water-based and biodegradable.
- VIGON® PE 194A is formulated free of any halogenated compounds and environmentally friendly.
- 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 194A 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® PE 194A, 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® PE 194A 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.