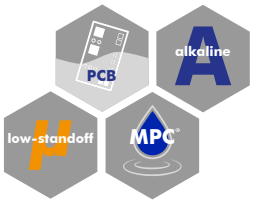
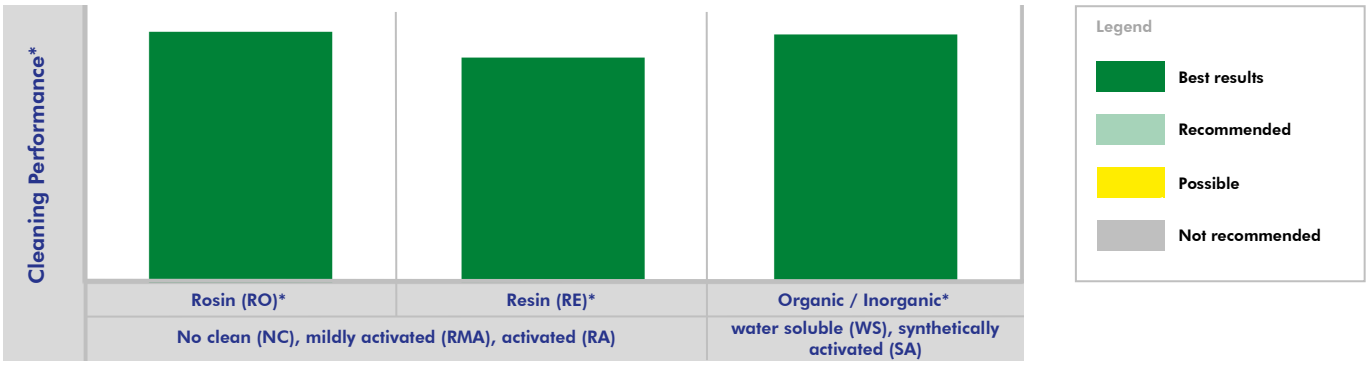
VIGON® A 201

Water-based, alkaline defluxing agent for spray-in-air processes



VIGON® A 201 provides excellent cleaning performance in spray-in-air processes for the cleaning of capillary spaces, e.g. under low standoff components. The MPC®-based cleaning agent is especially suitable for the removal of flux residues from leaded as well as lead-free No-Clean solder pastes and provides shiny solder joints after cleaning without the need for additives. VIGON® A 201 is also suitable for the removal of tacky fluxes from Flip Chips and CMOS as well as for flux removal from Power LEDs after die attach.

Areas of application – PCBA Defluxing



* J-STD-004

Advantages compared to other cleaners

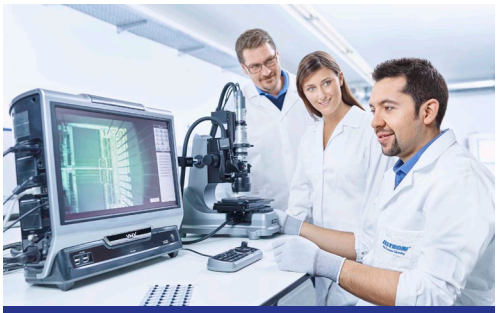
- Successfully cleans under low standoff components such as Micro BGAs, Flip Chips, and 01005 components.
- Especially effective for lead-free No-Clean solder pastes.
- Leaves shiny solder joints on assemblies after cleaning without any additional additive.
- High bath loading capacity ensures extended bath life, low maintenance cost and reduced cost per cleaned part
- Easy to rinse, does not leave any residues on the surfaces.
- Ensures a void-free underfill and improves the image resolution by removing all tacky fluxes from Flip Chips/CMOS.
- Optimal flux removal after die attach increases wire bonding quality as well as light conversion and life time of Power LEDs.

Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air (inline & batch)	PCBAs, (Flip Chips / CMOS, Power LEDs)	VIGON® A 201	DI-water	Hot air or circulating air

Independent Test Center - Largest choice of leading machines, chemistry & analytics

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	28.7
Boiling point	°C/°F	> 100°C / > 212°F
Flash point	°C/°F	None until boiling
pH value	10g/l H_2O	10.5
Vapor pressure	(mbar) at 20°C/68°F	Approx. 20
Cleaning temperature	°C/°F	40 - 60°C / 104 - 140°F
Solubility in water		Soluble
Application concentration[1] (inline)	Concentrate	10 - 20 %
Application concentration[1] (batch)	Concentrate	20 - 30 %
HMIS Rating	Health-Flammability-Reactivity	1 - 0 - 0

* Please note that the following information represents VIGON® A 201 at 15 % concentration.

[1] The concentrate of VIGON® A 201 has to be diluted in DI-water.

Product Features & Cleaning Standards

RoHS WEEE Compliant	100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)
PB lead-free	Extensively tested and suitable for cleaning lead-free solder pastes
MPC	MPC® Technology ensures an extremely long bath life when used in a closed loop system
Reach Compliant	Product is free of any critical substances according to SIN & SVHC lists

Electronic assemblies cleaned with VIGON® A 201 in a ZESTRON specified process meet the following industry standards:

- 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

A cleaning process using VIGON® A 201 can help to reduce particle contamination.

Environmental, health & safety regulations

- VIGON® A 201 is water-based and biodegradable.
- VIGON® A 201 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® A 201 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® A 201, 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® A 201 a variety of process support products are available:

Concentration measurement:
- ZESTRON® EYE for automated real-time concentration monitoring providing 100% traceability,
- ZESTRON® Bath Analyzer 10 a manual test method for fast and reliable checks on cleaner concentration.

Cleaning agent regeneration:
- ZESTRON® Adsorber HM1 allows for the adsorption of heavy metals in your cleaning process when VIGON® A 201 is applied.