# **Technical Information**



# VIGON A 301

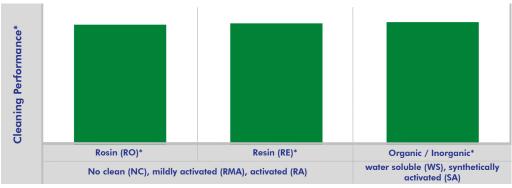


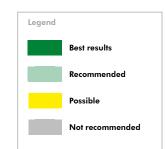
## Water-based, mild alkaline defluxing agent for electronic assemblies

VIGON® A 301 is a waterbased, mild alkaline MPC® cleaning agent for electronic assemblies. It reliably removes flux residues and in particular residues of synthetic solder pastes.

VIGON® A 301 also achieves excellent cleaning results under low-standoff components and has very good rinsing properties. Although it is especially designed for spray-in-air machines, it can also be used in dip tank machines.

## **Areas of application – PCBA Defluxing**





#### Advantages compared to other cleaners

- Excellent removal of synthetic solder pastes.
- Very good rinseability.
- Especially recommended for cleaning of PCBAs with low stand-off components.
- No flash point and no foaming, 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)	PCBAs	VIGON® A 301	DI-water	Hot air or circulating air
Dip tank (US / SUI)	PCBAs	VIGON® A 301	DI-water	Hot air or circulating air

<sup>\*</sup> J-STD-004



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





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

- 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	1.002
Surface tension	(mN/m) at 25°C/77°F	38.0
Boiling point	°C/°F	80°C / 176°F
Flash point	°C/°F	None until boiling
pH value	10g/l H₂O	9.3
Vapor pressure	(mbar) at 20°C/68°F	23.3
Cleaning temperature	°C/°F	50 – 70°C / 122 – 158°F
Solubility in water		Miscible
Application concentration <sup>1</sup> (inline)	Concentrate	15 – 25 %
Application concentration <sup>1</sup> (batch)	Concentrate	15 – 25 %
HMIS Rating	Health-Flammability-Reactivity	2 - 1 - 0

<sup>\*</sup> Please note that the following information represents VIGON  $^{\otimes}$  A 301 at 20 % concentration.

#### **Product Features & Cleaning Standards**



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



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

Electronic assemblies cleaned with VIGON  $^{\rm @}$  A 301 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  $^{\tiny{(0)}}$  A 301 can help to reduce particle contamination.

<sup>&</sup>lt;sup>1</sup> The concentrate of VIGON® A 301 has to be diluted in DI-water.

# **Technical Information**



#### **Environmental, health & safety regulations**

- VIGON® A 301 is water-based and biodegradable.
- VIGON® A 301 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 301 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 301, 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 301 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.