

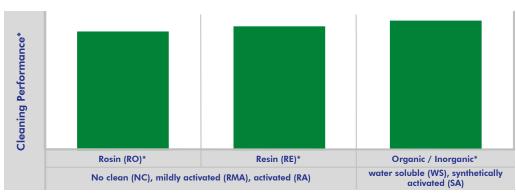




# Water-based cleaning agent for PCBA defluxing

VIGON® N 640 is a water-based, pH-neutral MPC® cleaning agent specifically developed for defluxing PCBAs. The cleaning agent is optimized for the use in specific spray-in-air batch machines. VIGON® N 640 provides excellent cleaning performance on the latest solder pastes and fluxes, including those that are generally hard to remove, and provides a very good material compatibility with sensitive metals such as copper or nickel.

# **Areas of application - PCBA Defluxing**





### Advantages compared to other cleaners

- Optimized for the use in specific spray-in-air batch machines
- Very good processability, ensures stable concentration between tank and chamber
- Excellent cleaning results, even on specific solder pastes that are hard to remove
- Can be easily rinsed off with DI-water, allowing to reduce the number of rinse cycles
- pH-neutral, providing very good material compatibility
- Suitable for select dip tank processes

#### **Process Steps**

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air <sup>1</sup> (batch)	PCBAs	VIGON® N 640	DI-water	Hot air or circulating air
Select dip tanks <sup>2</sup> (US, SUI)	PCBAs	VIGON® N 640	DI-water	Hot air or circulating air

<sup>&</sup>lt;sup>1</sup> Specifically recommended for machines with limited or no mixing of the cleaner in the tank.

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

<sup>&</sup>lt;sup>2</sup> Requires evaluation prior to US and SUI implementation.

# **Technical Information**



# 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	0.99
Surface tension	(mN/m) at 25°C/77°F	31.5
Boiling point	°C/°F	> 98°C / 208°F
Flash point	°C/°F	None until boiling
pH value	10g/l H₂O	Neutral
Vapor pressure	(mbar) at 20°C/68°F	Approx. 20
Cleaning temperature	°C/°F	40 - 60°C / 104 - 140°F
Solubility in water		Miscible
Application concentration <sup>1</sup>	Concentrate	15 - 25 %

<sup>\*</sup> Please note that the following information represents VIGON® N 640 at 15 % 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® N 640 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® N 640 can help to reduce particle contamination.

<sup>&</sup>lt;sup>1</sup> The concentrate of VIGON® N 640 has to be diluted in DI-water.

# **Technical Information**



# **Environmental, health & safety regulations**

- VIGON® N 640 is water-based and biodegradable.
- VIGON® N 640 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® N 640 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® N 640, 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® N 640 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.