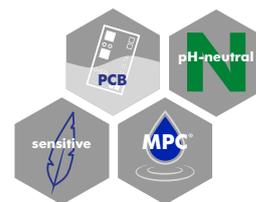


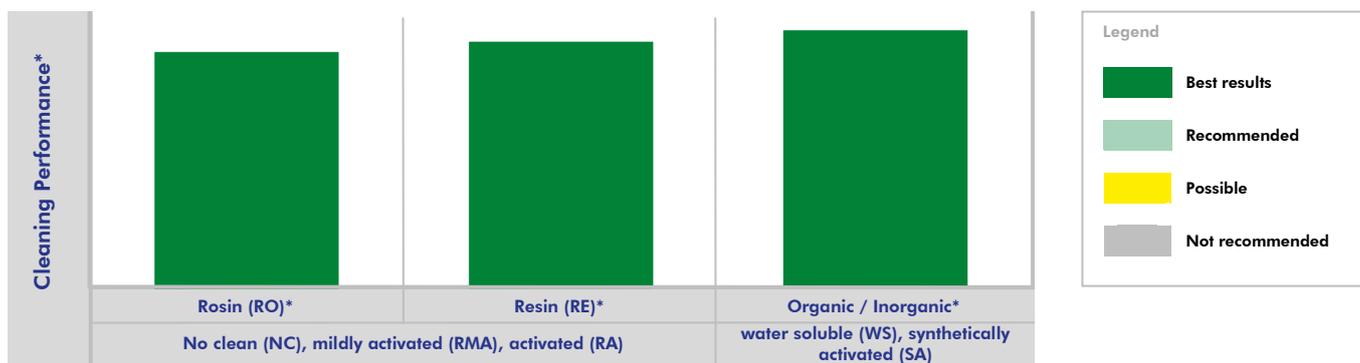
VIGON® N 640

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



* J-STD-004

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 ¹ (batch) | PCBAs | VIGON® N 640 | DI-water | Hot air or circulating air |
| Select dip tanks ² (US, SUI) | PCBAs | VIGON® N 640 | DI-water | Hot air or circulating air |

¹ Specifically recommended for machines with limited or no mixing of the cleaner in the tank.

² Requires evaluation prior to US and SUI implementation.

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: Phone +49 (841) 63526; techsupport@zestron.com / South Asia: Phone +604 (3996) 100; support@zestronasia.com

Or visit our website for a virtual tour: <http://www.zestron.com/en/company/virtual-company-tour.html>

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 H ₂ O | 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 ¹ | Concentrate | 15 - 25 % |

* Please note that the following information represents VIGON® N 640 at 15 % concentration.

¹ The concentrate of VIGON® N 640 has to be diluted in DI-water.

Product Features & Cleaning Standards

| | | |
|--|---|---|
| | 100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE) | Electronic assemblies cleaned with VIGON® N 640 in a ZESTRON specified process meet the following industry standards: <ul style="list-style-type: none"> ▪ IPC-A-610 Visual cleanliness ▪ J-STD 001 Ionic and resin cleanliness ▪ IPC 5704 Cleanliness requirements for bare boards ▪ IPC-Hdbk-65B Guidelines for cleaning of printed boards and assemblies |
| | 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 | |

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.