

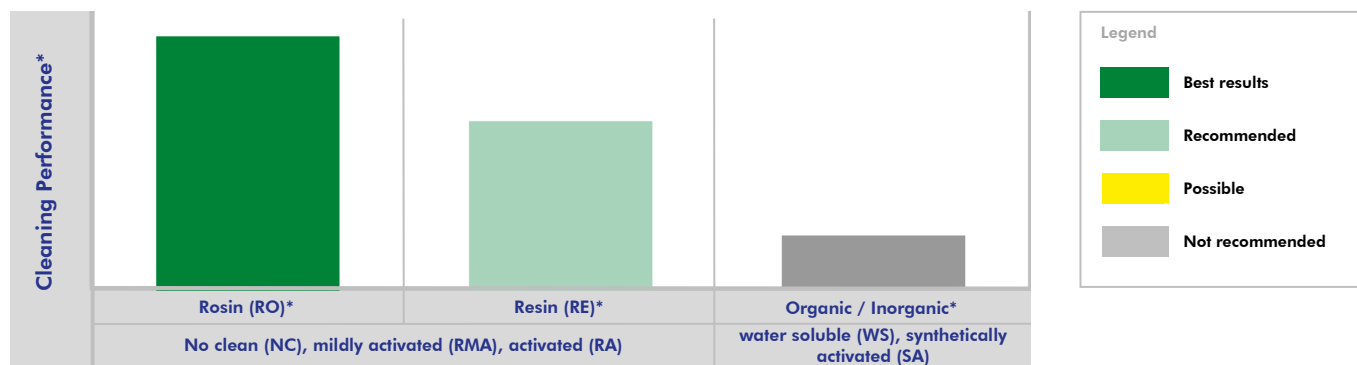
## VIGON® EFM



Solvent based flux remover for manual PCBA defluxing after rework

VIGON® EFM is a precision cleaning agent designed to remove flux residues from electronic assemblies in manual applications. This product can also be used in explosion-proof spray-in-air equipment. VIGON® EFM is a mixture of halogen-free organic solvents. It dries fast and residue-free. VIGON® EFM is non-corrosive and compatible with most polymers.

### Areas of application – PCBA Defluxing



\* J-STD-004

### Advantages compared to other cleaners

- Especially suitable for the removal of resin-based flux residues.
- This product dries very fast and residue-free.
- Easy-to-use, for both manual and automatic cleaning in explosion-proof equipment.
- Very suitable as a cleaning and rinsing agent.

### Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Manual cleaning	PCBAs	VIGON® EFM	VIGON® EFM	Compressed air or open air evaporation
Spray-in-air (explosion-proof)	PCBAs	VIGON® EFM	VIGON® EFM	Compressed air or open air evaporation

## 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](mailto:techsupport@zestron.com) / South Asia: Phone +604 (3996) 100; [support@zestronasia.com](mailto: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	0.72
Surface tension	(mN/m) at 25°C/77°F	18.6
Boiling point	°C/°F	78 - 120°C / 172 - 248°F
Flash point	°C/°F	-12°C / 10°F
pH value	10g/l H <sub>2</sub> O	Not applicable
Vapor pressure	(mbar) at 20°C/68°F	Approx. 77
Cleaning temperature	°C/°F	Ambient Temperature
Solubility in water		Insoluble
Application concentration	Ready-to-use	Pure
HMIS Rating	Health-Flammability-Reactivity	1 - 4 - 0

## Product Features & Cleaning Standards

<p>100% compliance with EU guidelines (RoHS 1, 2 &amp; 3, WEEE)</p>	<p>Electronic assemblies cleaned with VIGON® EFM in a ZESTRON specified process meet the following industry standards:</p> <ul style="list-style-type: none"> <li>▪ IPC-A-610 Visual cleanliness</li> <li>▪ J-STD 001 Ionic and resin cleanliness and foreign object debris</li> <li>▪ IPC 5704 Cleanliness requirements for bare boards</li> <li>▪ IPC-Hdbk-65B Guidelines for cleaning of printed boards and assemblies</li> </ul> <p>A cleaning process using VIGON® EFM can help to reduce particle contamination.</p>
<p>Extensively tested and suitable for cleaning lead-free solder pastes</p>	
<p>Product is free of any critical substances according to SIN &amp; SVHC lists</p>	

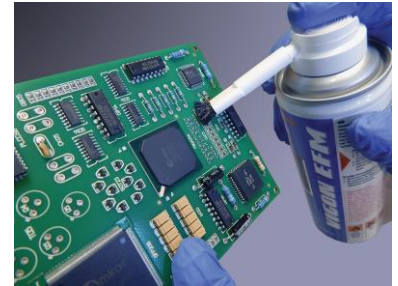
## Environmental, health & safety regulations

- VIGON® EFM is biodegradable.
- VIGON® EFM is a highly flammable cleaning agent.
- VIGON® EFM is formulated free of any halogenated compounds.
- Refer to the SDS for specific handling precautions and instructions.

## Availability & Storage

300 ml	✓
1 Liter	✓
25 Liter	✓
55 Liter	✓
200 Liter	✓

- VIGON® EFM is available as an easy-to-use aerosol can with detachable brush for the manual removal of flux residues.
- It is also available as ready-to-use solution.
- Store VIGON® EFM 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.
- **Safety data sheet**