# **Technical Information**





Solvent based flux remover for manual PCBA defluxing after rework



VIGON<sup>®</sup> 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<sup>®</sup> EFM is a mixture of halogen-free organic solvents. It dries fast and residue-free. VIGON<sup>®</sup> 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 <sup>®</sup> EFM	VIGON® EFM	Compressed air or open air evaporation
Spray-in-air (explosion-proof)	PCBAs	VIGON <sup>®</sup> EFM	VIGON <sup>®</sup> EFM	Compressed air or open air evaporation



## 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. 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	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/I 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**

RoHS WEEE Company	100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)	Electronic assemblies cleaned with VIGON® EFM in a ZESTRON specified process meet the following industry standards:
PB	Extensively tested and suitable for cleaning lead-free solder pastes	<ul> <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</li> </ul>
Reach	Product is free of any critical substances according to SIN & SVHC lists	A cleaning process using VIGON® EFM can help to reduce particle contamination.



## Environmental, health & safety regulations

- VIGON<sup>®</sup> EFM is biodegradable.
- VIGON<sup>®</sup> EFM is a highly flammable cleaning agent.
- VIGON<sup>®</sup> 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	~	•

- VIGON<sup>®</sup> 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<sup>®</sup> 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