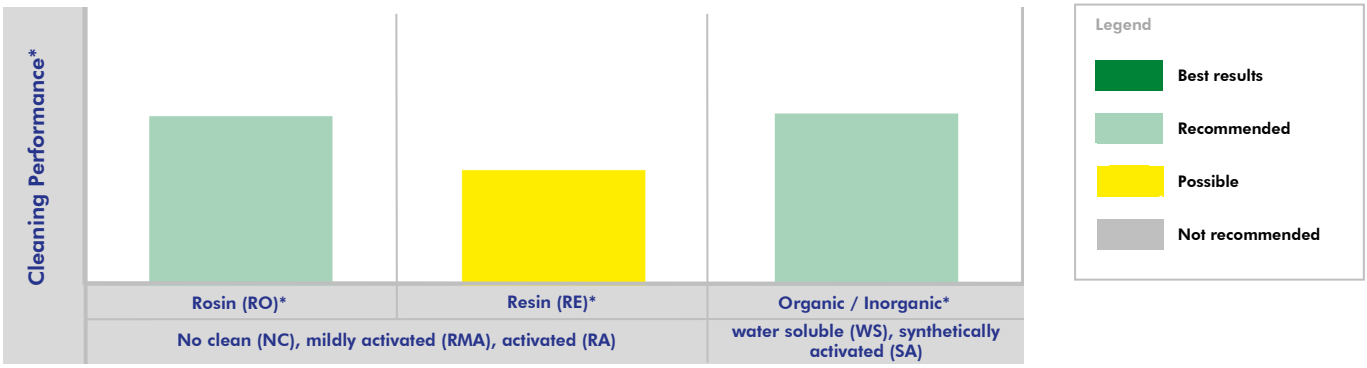
ZESTRON® VD

Solvent for water-free defluxing in one-chamber processes with vacuum distillation

ZESTRON® VD is a solvent-based cleaning agent designed to remove flux residues from electronic assemblies, ceramic hybrids and leadframe-based discretess in closed-loop one-chamber vacuum defluxing systems (vapor degreasing).

Areas of application – PCBA Defluxing



* J-STD-004

Advantages compared to other cleaners

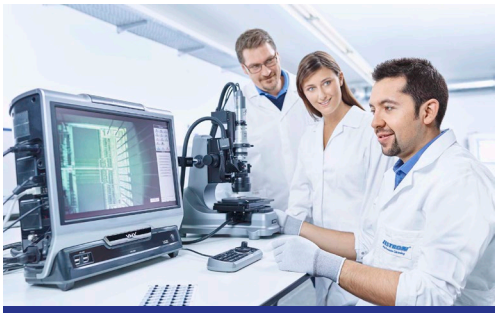
- Due to its polar and nonpolar components, ZESTRON® VD has a wide field of application.
- Completely distillable and therefore suitable for one-chamber vapor degreasing processes with vacuum distillation and a vapor rinsing step.
- ZESTRON® VD is surfactant-free and therefore dries residue-free.
- Particularly suitable for water-free applications, especially when rinsing with water is not an option.
- Increased wire bonding/molding quality for leadframe-based discrete components due to the complete removal of flux residues from leaded solder paste
- Can also be used for stencil cleaning and in SMT printers.

Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Closed-loop processes with vapor rinsing	PCBAs, Hybrids, Leadframe-based discretes	ZESTRON® VD	ZESTRON® VD	Vacuum
Spray-in-air (explosion-proof)	PCBAs, Hybrids	ZESTRON® VD	ZESTRON® VD	Ambient or compressed air

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: +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	0.88
Surface tension	(mN/m) at 25°C/77°F	26.3
Boiling point	°C/°F	170 - 175°C / 338- 347°F
Flash point	°C/°F	62°C / 144°F
pH value	10g/l H_2O	Not applicable
Vapor pressure	(mbar) at 20°C/68°F	1.0
Cleaning temperature	°C/°F	40 - 45°C / 104 - 113°F
Solubility in water		Insoluble
Application concentration	Ready-to-use	Pure
HMIS Rating	Health-Flammability-Reactivity	1 - 2 - 0

Product Features & Cleaning Standards

RoHS & WEEE Compliant	100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)
Pb lead-free	Extensively tested and suitable for cleaning lead-free solder pastes
Reach Compliant	Product is free of any critical substances according to SIN & SVHC lists

Electronic assemblies cleaned with ZESTRON® VD 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 ZESTRON® VD can help to reduce particle contamination.

Environmental, health & safety regulations

- ZESTRON® VD is biodegradable.
- ZESTRON® VD 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 ready-to-use solution
- Store ZESTRON® VD 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**