

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, power modules, and lead frame-based discretes in closed-loop one chamber vacuum (vapor) degreasing systems.

Areas of Application: PCBs, ceramic hybrids, lead frames

| Recommended Applications: | Additional Product Information |
|-----------------------------|---------------------------------|
| Low solid flux residues | Material Compatibility Overview |
| Rosin based flux residues | |
| Solder paste (unsoldered) | Safety Data Sheet |
| SMT or conductive adhesives | |
| Thick film pastes | |

Applies to leaded and lead-free solder pastes and liquid fluxes

Key Benefits

- Due to its polar and nonpolar components, ZESTRON® VD is suitable for a wide range of applications.
- Completely distillable and therefore suitable for one chamber vapor degreasing processes with vacuum distillation and vapor rinsing step.
- ZESTRON® VD is surfactant-free and therefore dries residue-free.
- Ideal for use in water-free application, especially when water rinsing is restricted.
- 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 | PCBs, Hybrids, Lead frame-based discretes | ZESTRON® VD | ZESTRON® VD | Vacuum |
| Spray-in-air (explosion-proof) | PCBs, Hybrids | ZESTRON® VD | ZESTRON® VD | Ambient or compressed air |

Please refer to the Material Compatibility Overview prior to cleaning plastics.

Technical Data

| | | |
|---------------------------|-----------------------------------|-----------------------|
| Density | (g/cm ³) at 20°C/68°F | 0.88 |
| Surface tension | (mN/m) at 25°C/77°F | 26.3 |
| Boiling point | °C/°F | 170 – 175 / 338 – 347 |
| Flash point | °C/°F | 62 / 144 |
| pH value | 10g/l H ₂ O | Neutral |
| Vapor pressure | (mbar) at 20°C/68°F | 1.0 |
| Cleaning temperature | °C/°F | 40 – 45 / 104 – 113 |
| Application concentration | Ready-to-use | Pure |
| HMIS Rating | Health-Flammability-Reactivity | 1 – 2 – 0 |

Product Features & Cleaning Standards



Extensively tested and suitable for cleaning of lead-free solder pastes



100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)



Product is free of any critical substances according to SIN & SVHC lists

Environmental, Health & Safety Regulations

- ZESTRON® VD is biodegradable.
- Formulated free of any halogenated compounds.
- Refer to the SDS for specific handling precautions and instructions.

Availability & Storage

| | |
|-----------|---|
| 1 Liter | ✓ |
| 5 Liter | ✓ |
| 25 Liter | ✓ |
| 200 Liter | ✓ |

- Available as concentrate
- 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.



Contact ZESTRON's Application Engineering Team for more information or trials:
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