



# Solvent-based cleaning medium for defluxing



ZESTRON<sup>®</sup> VD is a solvent-based cleaning agent designed to remove flux residues from electronic assemblies, ceramic hybrids, power modules and lead frames in closed-loop, one chamber, vapor degreasing type systems.

Areas of application: PCB's, ceramic hybrids, power modules & lead frames		Additional product information:	
Low solid flux residues*	+		
Rosin based flux residues*	+	Application Recommendation: Specific parameters for your cleaning process	
Water soluble flux residues*	о	Technical Information Sheet 2:	
Solder paste (unsoldered)	++	Overview of pastes and fluxes tested	
SMT or conductive adhesives	+	Technical Information Sheet 3: Material compatibility overview	
Thick film pastes	+		
-+ highly recommended, best results	+ recommend	ded 0 possible	

Technical Centers -  ${\rm (I)}$  America  ${\rm (2)}$  Europe  ${\rm (3)}$  Malaysia  ${\rm (4)}$  East China  ${\rm (5)}$  South China Cleaning Process Solutions under Production Floor Conditions



Contact ZESTRON's Process Engineering Team for free-of-charge cleaning trials: Phone: +1 (703) 393-9880; Email: <u>infoUSA@zestron.com</u>

## Advantages compared to other surfactant cleaners:

- Due to its polar and nonpolar components, ZESTRON<sup>®</sup> VD is suitable for a wide range of applications.
- Completely distillable and therefore suitable for one chamber vapor degreaser processes with vacuum distillation and vapor rinsing step.
- Halogen and surfactant-free.
- Dries residue-free.
- Ideal for use in water-free applications, especially when water rinsing is restricted
- Ideal for cleaning capillary spaces, such as underneath BGA's and flipchips.
- Also applicable for stencil cleaning and underside wipe processes in SMT printers.

Please refer to the material compatibility datasheet (Technical Information 3) prior to cleaning plastics.



America Manassas, VA-USA infousa@zestron.com





Process	1. Cleaning	2. Rinsing	3. Drying
Closed loop processes with vapor rinsing	ZESTRON <sup>®</sup> VD	ZESTRON <sup>®</sup> VD	Vacuum
Spray-in-air (explosion-proof)	ZESTRON <sup>®</sup> VD	ZESTRON <sup>®</sup> VD	Ambient or compressed air
Ultrasonic	ZESTRON <sup>®</sup> VD	ZESTRON <sup>®</sup> VD	Ambient or compressed air

Technical Data					
Density	g/ccm at 20°C / 68°F	0.88			
Surface tension	mN/m at 25°C / 77°F	26.3			
Boiling range	°C/°F	170 - 175 / 338 - 347			
Flash point	°C/°F	62 / 144			
pH-value	10g/I H <sub>2</sub> 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**



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



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

### Environmental, health and safety regulations:

- ZESTRON<sup>®</sup> VD is solvent-based and biodegradable.
- The cleaner does not contain any halogenated compounds and is environmentally friendly.
- Refer to the MSDS for specific handling precautions and instructions.

#### **Availability:**

• ZESTRON<sup>®</sup> VD is available in 1L, 5L or 25L containers and 200L drums.

#### Storage:

- Store ZESTRON<sup>®</sup> 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.

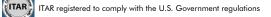
#### Alternative product recommendation:

- For the removal of flux residues with a MPC<sup>®</sup> based medium in dip tanks, we recommend VIGON<sup>®</sup> US.
- For cleaning in spray applications, we recommend VIGON<sup>®</sup> A 250 and VIGON<sup>®</sup> A 201.

#### **Cleaning standards:**

Electronic assemblies cleaned in a ZESTRON specified process with ZESTRON<sup>®</sup> VD meet the following industry standards:

- IPC 610 Visual cleanliness
- J-STD 001 E lonic cleanliness
- IPC-TM 650 and DIN 32513 (surface resistance)
- J-STD 003 Solderability



CHNICAL INFORMATION

South Asia Kulim-Malaysia infoasia@zestron.com

America Manassas, VA-USA infousa@zestron.com

> ngolstadt–Germany info@zestron.com