

VIGON[®] US

Water-based cleaning medium for flux removal



VIGON[®] US (US = ultrasonic) is a water-based medium especially developed for use in ultrasonic, spray-under-immersion and centrifugal cleaning equipment. Based on MPC[®] Technology, VIGON[®] US removes all types of flux residues from electronic assemblies, ceramic hybrids, power modules and leadframes.

Areas of application: PCB's, ceramic hybrids, power modules, leadframes		Further information on this product:
Low solid flux residues*	++	Technical Information sheet 2: Overview of all fluxes and solder pastes tested Technical Information sheet 3: Overview regarding material compatibility Application Recommendation: Specific process parameters for your cleaning trial MPC[®] Technology Information sheet: Additional information on MPC [®] Technology
Rosin-based flux residues*	++	
Water soluble flux residues*	++	
Solder pastes (unsoldered)	++	
SMT-adhesive or conductive adhesive	-	
Misprinted thick film pastes	+	

++ highly recommended, best results + recommended o possible - not recommended
 * Valid for all standard, lead-free and lead-based solders

Free-of-Charge Cleaning Trials & Surface Analytics at ZESTRON's Technical Centers



Free-of-charge cleaning trials can be performed at one of ZESTRON's Global Technical Centers. ZESTRON's European, North American and Asian Technical Centers feature spray-in-air, ultrasonic or spray-under-immersion processes. This provides an extensive overview on all available processes by leading international equipment manufacturers.



Upon completion of the cleaning trials, extensive analytical tests such as SIR and ionic residue measurements can be performed.

Please consult with ZESTRON's Application Technology Centers regarding future cleaning trials: Phone +49-841-635-26; Email: techsupport@zestron.com

Advantages compared to other cleaners:

- Due to its wide process window VIGON[®] US easily removes flux residues and solder paste.
- VIGON[®] US has no flash point and does not require any explosion proof precautions.
- The cleaning medium was especially designed for use in dip tank systems.
- Due to its formulation VIGON[®] US can be rinsed easily without leaving residues on the surface and provides low ionic contamination of cleaned parts.
- It's high bath loading capacity ensures extended bath life, low maintenance costs and reduced cleaning agent costs.
- VIGON[®] US works exceptionally well for the cleaning of capillary spaces and is also suitable for the cleaning of low stand off components.
- Low odor.

Please refer to the material compatibility list (Technical Information 3) before cleaning plastics.

VIGON[®] US is approved by leading international manufacturers of cleaning equipments. Written approvals can be obtained from ZESTRON.

Process	Cleaning	Rinsing	Drying
Ultrasonic	VIGON® US	DI-water	Hot or circulated air
Spray-under-immersion	VIGON® US	DI-water	Hot or circulated air
Centrifugal cleaning	VIGON® US	DI-water	Hot air

Technical Data		
Please note that the information below represents VIGON® US at a 20 % concentration.		
Density	(g/ccm) at 20°C/68°F	0.99
Surface tension	(mN/m) at 25°C/77°F	30.8
Boiling range	°C/°F	165 – 212 / 329 – 414
Flash point	°C/°F	none
pH-Value	10g/l H ₂ O	11
Vapor pressure	(mbar) bei 20°C/68°F	19
Cleaning temperature	°C/°F	40 – 60 / 104 – 140
Solubility in water		soluble
Application concentration ¹	Concentrate in %	15 - 30
HMIS Rating	Health-Flammability-Reactivity	0 – 0 – 0

¹ VIGON® US is recommended to be diluted with DI-water only.

LEAD-FREE COMPLIANT



VIGON® US meets the new RoHS & WEEE guidelines as well as current worker safety standards and the actual applicable environmental requirements. ZESTRON voluntary avoids the use of critical substances at product development.



Extensive tests confirmed the qualification of VIGON® US for the cleaning of lead-free solder pastes. For detailed results please request our Technical Information 2.

Filter recommendation:

To take full advantage of the MPC® technology and further expand VIGON® US bath life, filtration is recommended. For details, please request our "Filter Recommendation" sheet.

Environmental and health and safety regulations:

VIGON® US does not contain any halogenated compounds and is environmentally friendly. No special precaution for the handling of the VIGON® US is required.

Availability/Storage:

VIGON® US is available as concentrate solution in 1L bottles, 5L or 25L canisters or 200L drums. This product is non-hazardous.

Store VIGON® US 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 application in spray-in-air systems such as inline and batch equipment we recommend the MPC® based wide-range cleaner VIGON® A 200.

Cleaning standards:

Electronic assemblies cleaned with VIGON® US in a ZESTRON specified process meet the following industry standards:

- IPC 610 Visual cleanliness
- J-STD 001 D Ionic cleanliness
- IPC-TM 650 and DIN 32513 (surface resistance)
- J-STD 003 solderability