

ZESTRON® FA⁺

Solvent-based medium for PCB flux removal



ZESTRON® FA+ is a solvent-based cleaning agent designed to remove all types of flux residues from electronic assemblies, ceramic hybrids, power modules and lead frames. This product is characterized by its high cleaning performance and bath loading capability ensuring an extremely long bath life.

Areas of application: PCB's, ceramic hybrids, power modules, lead frames		Additional product information:
Low solid flux residues	++	Application Recommendation: Specific parameters for your cleaning process Technical Information sheet 2: Overview of all fluxes and solder pastes tested Technical Information sheet 3: Material compatibility overview
Rosin based flux residues	++	
Water soluble flux residues	+	
Solder paste (unsoldered)	++	
SMT or conductive adhesives	+	

++ highly recommended, best results + recommended 0 possible

Technical Centers - ① America ② Europe ③ Malaysia ④ East China 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: infoUSA@zestron.com

Advantages compared to other surfactant cleaners:

- High bath loading capability of ZESTRON® FA+ ensures an extended bath life.
- Based on non-halogenated, organic solvents.
- The cleaning medium does not require any specific explosion-proof precautions.
- Due to the surfactant-free formulation, ZESTRON® FA+ is easily rinsed.
- Can be used for cleaning ceramic substrates in thick film applications and for flip-chip applications in the semiconductor industry.
- ZESTRON® FA+ has been EMPF Phase II tested and MIL approved.
- This cleaning medium is listed on the ESA 'list of declared materials'.

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

Process	1. Cleaning	2. Rinsing	3. Drying
Ultrasonic	ZESTRON® FA+	DI-water	Hot or circulated air
Spray-under-immersion	ZESTRON® FA+	DI-water	Hot or circulated air
Centrifugal cleaning	ZESTRON® FA+	DI-water	Hot air

Technical Data		
Density	g/ccm at 20°C / 68°F	0.94
Surface tension	mN/m at 25°C / 77°F	29.1
Boiling range	°C/°F	162 - 190°C / 324 - 374°F
Flash point	°C/°F	75°C / 167°F
pH-value	10g/l H ₂ O	10.4
Vapor pressure	(mbar) at 20°C/68°F	0.47
Cleaning temperature	°C/°F	40 - 55°C / 104 - 131°F
Solubility in water		soluble
Application concentration	Concentrate in %	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® FA+ 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® FA+ is available as a ready-to-use-solution in 1L, 5L or 25L containers and 200L drums.
- The product is non-hazardous.

Storage:

- Store ZESTRON® FA+ 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 fluxes with an MPC® based medium in dip tanks, we recommend VIGON® US.
- For cleaning in spray applications, we recommend VIGON® A 250 and VIGON® A 201.

Cleaning standards:

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

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

