

ZESTRON® CO 150

Precision cleaning medium for water-free Co-Solvent processes



ZESTRON® CO 150 is a solvent-based cleaning agent developed for the use in ultrasonic dip tank processes. ZESTRON® CO 150 can be used undiluted as a pre-cleaner or as a Co-solvent mixture in combination with a HFE-agent. ZESTRON® CO 150 is especially suitable for removing flux residues from leaded as well as lead-free NoClean solder pastes from electronic assemblies and leadframe-based discrete devices.

Areas of application: PCB cleaning		Further information on this product: Technical Information 2 Overview of all fluxes and solder pastes tested Technical Information 3 Material compatibility overview
Low solid flux residues	+	
Rosin-based flux residues	++	
Water soluble flux residues	0	
Misprinted boards		
Solder paste (unsoldered)	0	

++ highly recommended, best results + recommended 0 possible - not recommended

Technical Centers - ① America, ② Europe, ③ Malaysia, ④ North-China, ⑤ South-China Cleaning Process Solutions under Production Floor Conditions



Contact ZESTRON's Process Engineering Team for free-of-charge cleaning trials:
Phone: +49-841-635-26; Email: techsupport@zestron.com

Advantages compared to other cleaners:


- Good cleaning results with lead-based and lead-free solder pastes.
- ZESTRON® CO 150 guarantees a stable cleaning process as it minimizes boiling retarding.
- Opens a broader concentration window for process controlling.
- Stabilizes the cooling zone and helps to minimize the HFE consumption.
- In combination with a HFE-process, ZESTRON® CO 150 enables a totally water-free cleaning process and fast residue-free drying.
- Low ionic contamination values can be achieved despite the water-free process.

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


Process Steps	1. Cleaning	2. Rinsing	3. Drying
Ultrasonic	ZESTRON® CO 150 or ZESTRON® CO 150/ Novec™ HFE-Mixture	Novec™ HFE	Self drying in the cooling zone
Spray-under-immersion	ZESTRON® CO 150 or ZESTRON® CO 150/ Novec™ HFE-Mixture	Novec™ HFE	Self drying in the cooling zone

Technical Data		
Please note that the information below represents ZESTRON® CO 150 at 100 % concentration.		
Density	(g/ccm) at 20°C/68°F	0.817
Surface tension	(mN/m) at 25°C/77°F	23.8
Boiling range	°C/°F	171-214 / 340-417
Flash point	°C/°F	68 / 154
pH-value	10g/l H ₂ O	3.2
Vapor pressure	(mbar) at 20°C/68°F	0.668
Cleaning temperature	°C/°F	50 – 75 / 122 – 167
Application concentration	in Combination with 3M™ Novec™ HFE	50 – 70 %
HMIS Rating	Health-Flammability-Reactivity	1 – 2 – 0


PRODUCT FEATURES



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



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



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

Filter recommendation:

- To further improve the long bath life of ZESTRON® CO 150, filtration is recommended.
- For details, please request our "Filter Recommendation" sheet.

Environmental, health and safety regulations:

- Refer to the MSDS for specific handling precautions and instructions.

Availability/Storage:

- ZESTRON® CO 150 is available in 1l bottles, 5l or 25l containers and 200l drums.
- Store ZESTRON® CO 150 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.

Disposal:

- For further information please consult ZESTRON's Application Technology team.
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Cleaning standards:

Electronic assemblies cleaned with ZESTRON® CO 150 in a ZESTRON specified process meet the following industry standards:

- IPC-A-610 Visual cleanliness
- J-STD 001 Ionic and resin cleanliness
- IPC-TM 650 and DIN 32513 (surface resistance)
- J-STD 003 Solderability