

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. (Phone: +49-841-635-26; Email: techsupport@zestron.com)

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