

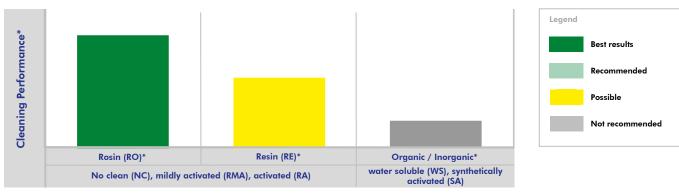
# IESTRON° CO 150



#### Co-solvent used with HFE for water-free defluxing 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, power modules and leadframe-based discrete components.

# **Areas of application – PCBA Defluxing**



<sup>\*</sup> J-STD-004

#### Advantages compared to other cleaners

- Good cleaning results with lead-based and lead-free solder pastes.
- Increased wire bonding/molding quality for power modules and leadframe-based discrete components.
- Guarantees a stable cleaning process as it minimizes boiling retarding.
- Opens a broader concentration window for process control.
- Stabilizes the cooling zone and helps to minimize the HFE consumption.
- In combination with an HFE-process, ZESTRON® CO 150 enables a completely water-free cleaning process and fast residue-free drying.
- Low ionic contamination values can be achieved despite the water-free process.

# **Process Steps**

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
CoSolvent process (Ultrasonic, Spray-under-immersion)	PCBAs, (Power Modules, Leadframes)	ZESTRON® CO 150 or ZESTRON® CO 150/ Novec <sup>TM</sup> HFE-Mixture	Novec™ HFE	Self-drying in the cooling zone



# Independent Test Center - Largest choice of leading machines, chemistry & analytics





Visit our Machine Test Center and clean your electronic assemblies in cleaning machines of leading international equipment suppliers. Your benefits:

- You are introduced to the cleaning machines & you clean your PCBAs under production conditions supported by your ZESTRON process engineer You check the cleaning results immediately on site (ROSE, optionally IR, IC, SEM/EDX etc.) for maximum comparability & result transparency
- You receive a process guarantee including detailed process parameters for the machine/cleaner combination that we recommend

#### Contact ZESTRON's process engineers for cleaning trials:

Europe: +49 8453 41995 318; techsupport@zestron.com / South Asia: +604 (3996) 100; support@zestronasia.com

#### **Technical Data\***

Density	(g/ccm) at 20°C/68°F	0.817
Surface tension	(mN/m) at 25°C/77°F	23.8
Boiling point	°C/°F	171 - 214°C / 340 - 417°F
Flash point	°C/°F	68°C / 154°F
pH value	10g/l H₂O	3.2
Vapor pressure	(mbar) at 20°C/68°F	0.668
Cleaning temperature	°C/°F	50 - 75°C / 122 - 167°F
Solubility in water		Insoluble
Application concentration	In combination with 3M <sup>TM</sup> Novec <sup>TM</sup> HFE	50 - 70%
HMIS Rating	Health-Flammability-Reactivity	1 - 2 - 0

<sup>\*</sup> Please note that the following information represents ZESTRON® CO 150 at 100 % concentration.

### **Product Features & Cleaning Standards**



100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE)



Extensively tested and suitable for cleaning lead-free solder pastes



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

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 and foreign object debris
- IPC 5704 Cleanliness requirements for bare boards
- IPC-Hdbk-65B Guidelines for cleaning of printed boards and

A cleaning process using ZESTRON® CO 150 can help to reduce particle contamination.

# **Technical Information**



### **Environmental, health & safety regulations**

- ZESTRON® CO 150 is biodegradable.
- ZESTRON® CO 150 is formulated free of any halogenated compounds.
- Refer to the SDS for specific handling precautions and instructions.

# **Availability & Storage**

1 Liter	✓
5 Liter	✓
25 Liter	✓
200 Liter	✓

- Available as ready-to-use solution
- 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.



# **Further product information**

- Material Compatibility
  Please review the Material Compatibility overview before using the cleaning agent.
- Filter recommendation
  To further extend the bath life of ZESTRON® CO 150, filtration is recommended.
- Safety data sheet