

# ZESTRON® ES 200

## Strong adhesive remover for ultrasonic applications



ZESTRON® ES 200 is a modified alcohol cleaning agent designed to remove epoxies (SMT adhesives and conductive adhesives) from tools (particularly dispensing needles) and electronic manufacturing substrates in ultrasonic cleaning equipment.

Areas of application: Maintenance cleaning		Additional product information:
SMT adhesive	++	<b>Technical Information 3:</b> Material compatibility overview
Conductive adhesive	++	
Other adhesives	+	
Rosin based flux residues	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](mailto:techsupport@zestron.com)

### Advantages compared to other solvent cleaners:

- ZESTRON® ES 200 has a high bath loading capability and therefore a long bath life as well as low maintenance costs.
- Specifically formulated to remove even persistent adhesive residues.
- Due to its high flash point, ZESTRON® ES 200 can be used in ultrasonic baths at a temperature between 20 - 60°C / 68 - 140°F.
- To ensure a short drying time, rinsing with ZESTRON® HC or water is recommended.

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

Process Steps	1. Cleaning	2. Rinsing	3. Drying
Ultrasonic	ZESTRON® ES 200	ZESTRON® HC or water	Hot or circulated air

Technical Data		
Density	(g/ccm) at 20°C/68°C	1.11
Surface tension	(mN/m) at 25°C/77°F	37
Boiling range	°C/°F	204 – 242 / 400 – 468
Flash point	°C/°F	90 / 194
pH-value	10g/l H <sub>2</sub> O	Neutral
Vapor pressure	(mbar) at 20°C/68°F	< 1
Solubility in water		Soluble
Cleaning temperature	°C/°F	20 – 60 / 68 – 140
Application concentration	Ready-to-use	Pure
HMIS Rating	Health-Flammability-Reactivity	1 – 2 – 0

## PRODUCT FEATURES



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

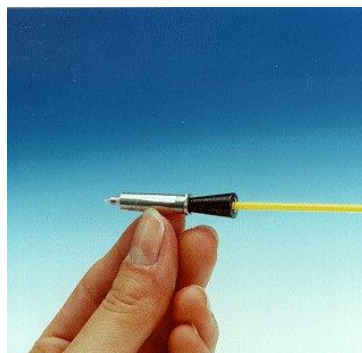


100% compliance with EU guidelines (RoHS 1 & 2, WEEE)

## Typical application:



Cleaning of dispensing needles with ZESTRON® ES 200 in an ultrasonic tank



Rinsing of dispensing needles with ZESTRON® HC (see alternative product recommendation)

## Environmental, health and safety regulations:

- ZESTRON® ES 200 is formulated free of halogenated compounds and is biodegradable.
- Refer to the MSDS for specific handling precautions and instructions.

## Availability/storage:

- ZESTRON® ES 200 is available in 1l bottles, 5l or 25l containers and 200l drums.
- Store ZESTRON® ES 200 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 manual cleaning of dispensing needles, we recommend ZESTRON® HC.