

# HYDRON® WS 400

## Aqueous-based cleaning medium for defluxing



HYDRON® WS 400 is a FAST® Technology based aqueous cleaning agent specifically designed to remove water soluble (WS) flux residues from electronic assemblies and is compatible with sensitive metals. Applied at low concentrations (3% to 5%), the cleaning agent has been specifically developed to penetrate the capillary spaces underneath low standoff components where DI-water only applications can no longer provide reliable cleanliness levels. Also, it effectively removes RMA and No Clean flux residues at increased concentrations up to 15%.

Areas of application: PCB	
Recommended solder paste applications:	Additional product information:
Water Soluble (WS)	<b>Technical Information Sheet 3:</b> Material compatibility overview  <b>FAST® Technology Sheet:</b> Additional information on FAST® Technology
No Clean (NC)	
Rosin Mildly Activated (RMA)	
Rosin (R)	
Rosin Activated (RA)	

Applies to leaded and lead-free solder paste and liquid fluxes

### 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](mailto:infousa@zestron.com)

### Advantages compared to other surfactant cleaners:

- Fast removal of a wide variety of the latest water soluble (WS) flux residues.
- Designed for use with WS pastes/fluxes at lower concentrations 3% to 5%.
- Non-foaming formula that does not promote "white scaling."
- Gentle formulation leaves solder joints and pads shiny and bright.
- Specifically formulated for excellent compatibility with aluminum and epoxy surfaces.
- Ethanolamine-free.
- Low odor.

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

TECHNICAL INFORMATION 1

ZESTRON

Europe

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Process	Cleaning	Rinsing	Drying
Spray-in-air (inline)	HYDRON® WS 400	DI-water	Hot or circulated air
Spray-in-air (batch)	HYDRON® WS 400	DI-water	Hot or circulated air
Ultrasonic	HYDRON® WS 400	DI-water	Hot or circulated air

Technical Data: HYDRON® WS 400 at 5% concentration		
Density	(g/ccm) at 20°C/68°F	1.00
Surface tension	(mN/m) at 25°C/77°F	39.6
Boiling range	°C/°F	> 98/208
Flash point	°C/°F	None
pH value	10g/l H <sub>2</sub> O	9.3
Cleaning temperature	°C/°F	40-70/104-158
Application concentration (WS)	%	3-5
Application concentration (RMA/No Clean)	%	3-15
HMS rating	Health-Flammability-Reactivity	1-0-0

Product Features	
 Extensively tested and suitable for cleaning of LF solder pastes	 Product is free of any critical substances according to SIN & SVHC lists
 100% compliance with EU guidelines	

## Environmental, health and safety regulations:

- HYDRON® WS 400 is water-based and biodegradable.
- Refer to the SDS for specific handling precautions and instructions.

## Availability:

- HYDRON® WS 400 is available as a concentrate in 1L bottles, 5L and 25L containers and 200L drums.

## Storage:

- Store HYDRON® WS 400 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.

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