

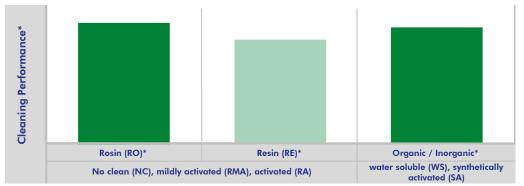
ATRON° AC 205



Water-based, alkaline defluxing agent

ATRON® AC 205 is a FAST® Technology-based cleaning agent specifically designed to remove flux residues from electronic assemblies. When compared to conventional surfactant-based cleaning agents, ATRON® AC 205 allows for much shorter contact times and provides a higher bath loading capacity. Therefore ATRON® AC 205 is especially suited for high pressure inline cleaning systems where short contact times are required. ATRON® AC 205 is also suitable for cleaning Power LEDs, Flip Chip Packages, CMOS and BGAs.

Areas of application – PCBA Defluxing





Advantages compared to other cleaners

- Allows for a quicker removal of a wide variety of the latest lead-free and eutectic flux residues.
- Gentle formula leaves solder joints and pads shiny and bright.
- Longer bath life than conventional surfactant-based cleaners.
- Ensures a void-free underfill and improves the image resolution by removing all tacky fluxes from Flip Chips and CMOS
- Optimal flux removal after die attach increases wire bonding quality as well as light conversion and life time of Power LEDs
- Free of Ethanolamine and other harmful substances.
- Extremely low VOC value.

Process Steps

Cleaning Process	Parts	1. Cleaning	2. Rinsing	3. Drying
Spray-in-air (inline & batch)	PCBAs, (Power LEDs, Flip Chip, CMOS)	ATRON® AC 205	DI-water	Hot air or circulating air
Dip tank (US, SUI), Centrifugal	Power LEDs, Flip Chip BGAs	ATRON® AC 205	DI-water	Hot air with vacuum drying

^{*} J-STD-004



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	1.00
Surface tension	(mN/m) at 25°C/77°F	28.9
Boiling point	°C/°F	> 100°C / > 212°F
Flash point	°C/°F	None until boiling
pH value	10g/l H₂O	10.4
Vapor pressure	(mbar) at 20°C/68°F	Approx. 20
Cleaning temperature	°C/°F	40 - 70°C / 104 - 158°F
Solubility in water		Miscible
Application concentration ¹ (inline)	Concentrate	5 - 15 %
Application concentration ¹ (batch)	Concentrate	15 – 30 %
HMIS Rating	Health-Flammability-Reactivity	1 - 0 - 0

^{*} Please note that the following information represents ATRON® AC 205 at 10 % 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



FAST® Technology ensures the fast removal of flux residues even under components



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

Electronic assemblies cleaned with ATRON® AC 205 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 assemblies

A cleaning process using ATRON $^{\tiny{(8)}}$ AC 205 can help to reduce particle contamination.

¹ The concentrate of ATRON® AC 205 has to be diluted in DI-water.

Technical Information



Environmental, health & safety regulations

- ATRON® AC 205 is water-based and biodegradable.
- ATRON® AC 205 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 concentrate
- Store ATRON® AC 205 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.

FAST® Technology Sheet

Detailed information on FAST® Technology

Filter recommendation

To take full advantage of FAST® Technology and further extend the bath life of ATRON® AC 205, filtration is recommended.

Safety data sheet

Available Process - Optimization - Products

To ensure a stable running cleaning process, it is important to monitor cleaning agent concentration and regular bath treatment. For ATRON® AC 205 a variety of process support products are available:



Concentration measurement:

 ZESTRON® Bath Analyzer 10 a manual test method for fast and reliable checks on cleaner concentration.



Cleaning agent regeneration:

 ZESTRON® Adsorber HM1 allows for the adsorption of heavy metals in your cleaning process when ATRON® AC 205 is applied.