

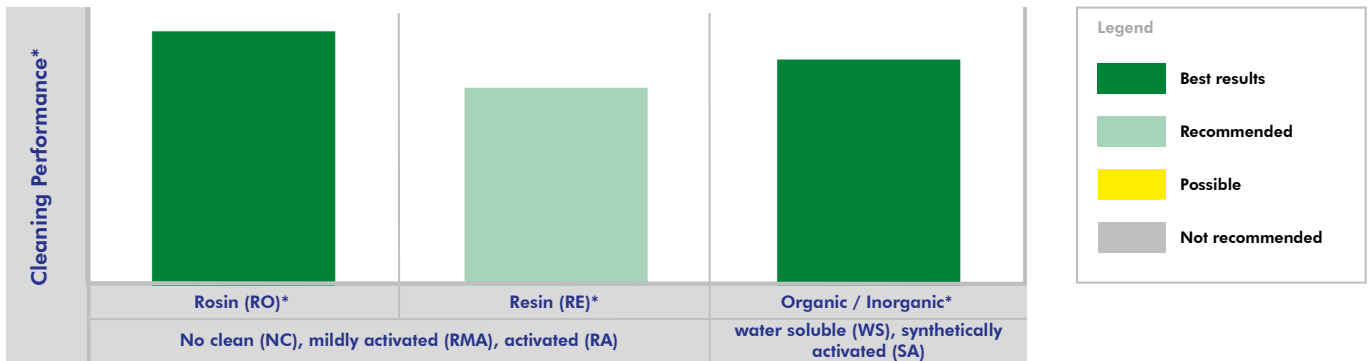
ATRON® AC 207

Water-based, alkaline defluxing agent for spray-in-air processes



ATRON® AC 207 is a FAST® Technology-based cleaning agent for electronic assemblies specifically designed to operate at low concentration levels. The product was developed to improve the cleaning performance and bath life of conventional surfactant-based cleaners and is particularly gentle on sensitive metals. ATRON® AC 207 can be used in processes with high as well as medium spray pressure in inline and batch cleaning systems.

Areas of application – PCBA Defluxing



* J-STD-004

Advantages compared to other cleaners

- Due to its mild formulation and the low operating concentration, the cleaning agent demonstrates a superior level of material compatibility with sensitive metals such as aluminum, brass, nickel, etc.
- Excellent cleaning performance, even at low concentrations and temperatures.
- 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.
- Ensures a void-free underfill by removing all tacky fluxes from Flip Chips.
- Increased wire bonding quality for power modules due to excellent flux removal.
- longer bath life than conventional surfactant-based cleaners and extremely low VOC levels.

Process Steps

| Cleaning Process | Parts | 1. Cleaning | 2. Rinsing | 3. Drying |
|----------------------------------|-----------------------------------------|---------------|------------|-------------------------------|
| Spray-in-air (inline & batch) | PCBAs (Power Modules, Flip Chips) | ATRON® AC 207 | DI-water | Hot air or circulating air |

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



Machine Test Center



Analytical Center

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: Phone +49 (841) 63526; techsupport@zestron.com / South Asia: Phone +604 (3996) 100; support@zestronasia.com

Or visit our website for a virtual tour: <http://www.zestron.com/en/company/virtual-company-tour.html>

Technical Data*

| | | |
|-------------------------------------------------|--------------------------------|-------------------------|
| Density | (g/ccm) at 20°C/68°F | 1.00 |
| Surface tension | (mN/m) at 25°C/77°F | 27.2 |
| Boiling point | °C/°F | > 100°C / > 212°F |
| Flash point | °C/°F | None until boiling |
| pH value | 10g/l H ₂ O | 10.2 |
| 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 207 at 10 % concentration.

¹ The concentrate of ATRON® AC 207 has to be diluted in DI-water.

Product Features & Cleaning Standards

| | | |
|--|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | 100% compliance with EU guidelines (RoHS 1, 2 & 3, WEEE) | Electronic assemblies cleaned with ATRON® AC 207 in a ZESTRON specified process meet the following industry standards: <ul style="list-style-type: none"> ▪ IPC-A-610 Visual cleanliness ▪ J-STD 001 Ionic and resin cleanliness ▪ IPC 5704 Cleanliness requirements for bare boards ▪ IPC-Hdbk-65B Guidelines for cleaning of printed boards and assemblies |
| | 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 | |

Environmental, health & safety regulations

- ATRON® AC 207 is water-based and biodegradable.
- ATRON® AC 207 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 207 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 207, 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 207 a variety of process support products are available:



Concentration measurement:

- ZESTRON® EYE for automated real-time concentration monitoring providing 100% traceability,
- ZESTRON® Bath Analyzer 10 a manual test method for fast and reliable checks on cleaner concentration.