

# BannerClean™ EC

## Technical Data Sheet



**Banner Chemicals Group UK**  
Flying the flag of excellence for over 150 years

**BannerClean EC aqueous defluxer** is a new, aqueous cleaning product for circuit board assembly and electronic component cleaning. This product quickly removes many types of no clean, lead-free and rosin solder flux residues after normal and high temperature soldering operations.

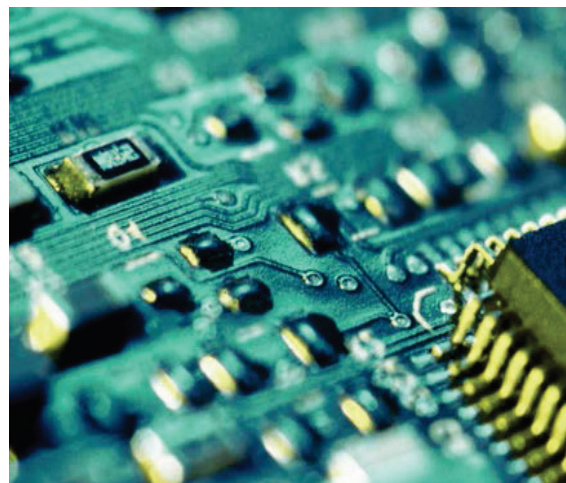
**BannerClean EC aqueous defluxer** is a concentrated mixture of water-dilutable solvents with a proprietary additive package for corrosion inhibition and solder brightening. This product has been specially formulated for low foaming when sprayed-in-air. BannerClean EC aqueous defluxer is considered low in toxicity, readily biodegradable and contains no monoethanolamine (MEA), halogens or heavy metals

### Spray Cleaning Process:

- Dilute BannerClean EC aqueous defluxer to 15% - 25% concentration in DI water.
- Wash cycle temperature is 50°C - 70°C and wash cycle time is 2 - 10 minutes.
- Rinse with heated & agitated DI water at 50°C - 70°C.
- Final drying use forced heated air.
- At initial startup each day run at least one cleaning cycle without parts for optimal performance.
- Although BannerClean EC itself is low foaming, some water soluble and other types of paste residues may cause aqueous baths to foam. BannerClean defoamer can be added if required.

### Ultrasonic Immersion Cleaning Process:

- Dilute BannerClean EC aqueous defluxer to 10% to 15% concentration in DI water.
- Wash cycle temperature is 50°C - 70°C and wash cycle time is 10 - 20 minutes. Removing baked-on flux from pallets and reflow oven parts may take longer.
- Rinse PCBs with DI water. Pallets and reflow oven parts can be rinsed with tap water.
- Options for drying include forced heated air, compress air gun or drying box.



### FEATURES & BENEFITS

- Cleans Wide Range of Flux
- High Soil Loading Capacity
- Low Odor
- Low Foaming
- Non Halogenated
- RoHS Compliant
- Leaves Bright Solder Joints
- Versatile Application
- Non-flammable in use
- Non Hazardous for shipping

### SOILS REMOVED

- Lead-free Flux Residues
- No-Clean Flux Residues
- High Temp Flux Residues
- Rosin Flux Residues
- Water-Soluble Flux Residues
- White residues
- Ionic Contamination
- Fingerprints

### OTHER APPLICATIONS

- Post Inspection Rework Cleaning
- Removes baked-on flux residues from pallets, fixtures and reflow oven parts.





## TYPICAL PROPERTIES\*

Appearance.....	Colorless to Pale Yellow Liquid
Odor.....	Mild
Specific Gravity.....	0.950 @25°C
Solubility in water.....	Dilutable
Flash Point.....	>100°C
Halogen Free.....	Yes
RoHS Compliant.....	Yes

\*Typical Properties data is not intended for specification purposes.

## COMPATIBILITY

BannerClean EC aqueous defluxer is compatible with most materials of construction in circuit assembly and semiconductor packaging. The product is safe on common metal alloys including aluminum during short exposure times. The product is also compatible with composite materials.

**STORAGE:** Store this product indoors under ambient conditions. (See MSDS for more details)

**SHELF LIFE:** Minimum 24 months.

**PACKAGING:** 19L plastic pail, 208L plastic drum

**SAFETY:** Please see Safety Data Sheet for further information.

**DISPOSAL:** Banner Chemicals recommends contacting your current or local environmental service company for disposal of this product.

## Environmental Policy

It is the aim of the Banner Chemicals Group to provide their customers the finest quality products and services whilst operating to the highest Health & Safety standards and minimising the impact on the Environment. This is obtained through an Integrated Management System (IMS). This system meets and where possible exceeds, the requirements of International Standards, ISO 9001:2008 (Quality), ISO 14001:2004 (Environmental) and OHSAS 18001:2007 (Health & Safety) The company is committed to preventing pollution by ensuring that its products are developed, handled, transported, used and disposed of safely and in compliance with relevant Environmental & Health & Safety Legislation, the CBA's Responsible Care Programme, Product Stewardship and Industry Codes of Practice.

\*BannerClean™ is a trademark of Samuel Banner & Co Ltd.

