

Berosol™ EC is an optimized surfactant blend that offers a way to introduce easy-clean benefits to hard surface cleaning formulations through temporary hydrophilic surface modification. Berosol™ EC can be used to clean ceramic tile, glass or porcelain in the form of ready to use or concentrated formulations, sprays and wipes.

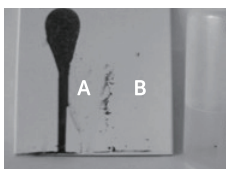
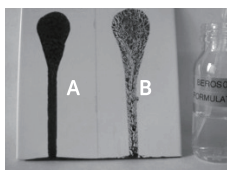
## Berosol™ EC

Easy-clean solutions



**Berosol™ EC provides for easier removal of greasy soils from ceramic tile**

**Test Method:** Surface was treated with the formulation, sprayed and wiped. 1 gram of soil\* was weighed on each side (untreated and treated). Tile was held in vertical position for 15 sec then rinsed carefully with water.



### CLEANER APPLIED

**A** Control (untreated)  
**B** Treated with Berosol™ EC formulation

\* Soil: Lambert soil, vegetable oil and water

### What is Berosol™ EC?

- A multifunctional, readily biodegradable, and water soluble cleaning product
- Easy to formulate with builders, complexing agents, acids and many other surfactants
- Berosol™ EC is an optimized surfactant blend that delivers long-lasting cleaning properties
- Berosol™ EC is TSCA listed

### Why use Berosol™ EC?

- To make hard surface cleaners that modify surfaces while cleaning to generate "easy-clean" behavior:
  - Less effort to clean next time around, and/or
  - Less frequent cleaning required
- To deliver anti-soiling and anti-fogging properties to surfaces:
  - Prevents soil deposition by making surfaces very hydrophilic
  - Provides excellent wetting properties which will prevent fogging on glass windows and mirrors
- Surfaces cleaned with formulations containing Berosol™ EC:
  - Resist soap scum build-up
  - Greasy soil is more easily removed

### TYPICAL PROPERTIES OF Berosol™ EC

|                                 |                        |
|---------------------------------|------------------------|
| Active content                  | 50%                    |
| Appearance, 20°C                | Liquid                 |
| pH, 1% in water                 | 6-8                    |
| Clear point                     | -2°C                   |
| Density, 20°C                   | 1095 kg/m <sup>3</sup> |
| Viscosity, 20°C                 | 230 cP                 |
| Surface tension (0.1% solution) | 28.3mN/m               |

### SOLUBILITY

|                                                                    |           |
|--------------------------------------------------------------------|-----------|
| Ethanol, isopropyl alcohol, low aromatic solvent, propylene glycol | Insoluble |
| Water                                                              | Soluble   |

### SURFACE ACTIVE CHARACTERISTICS

|                                                 |                                            |
|-------------------------------------------------|--------------------------------------------|
| Foam height, 50°C, 0.05% (Ross-Miles)           | Immediately 140 mm,<br>After 5 min. 100 mm |
| Surface tension, 25°C, 0.1% DI 53 914 (Du Noüy) | 30 mN/m                                    |
| Wetting power, 25°C, 0.1% (Draves)              | 95 sec                                     |