

Whether it is for a large stainless steel bioreactor or for tablet manufacturing equipment, developing a validated cleaning process will present unique cleaning challenges. STERIS offers a complete line of Pharmaceutical Detergents for the most challenging validated clean-in-place (CIP), clean-out-of-place (COP), and manual cleaning applications. You can be assured that our detergents will deliver consistent cleaning performance so there will be no surprises in your validated manufacturing process.



## Pharmaceutical Detergents

### Technical Services Team

Our technical support includes the Process And Cleaner Evaluation (PACE®) program, which is an evaluation service designed to provide our Customers with recommendations for an effective cleaning process. Once an evaluation has been completed, STERIS provides a report that assists Customers in developing a cleaning process by defining parameters based on chemistry, concentration, cleaning time, temperature, cleaning method and water quality. The PACE program is an essential first step for any cleaning application.

A highly-qualified, industry-recognized team of chemists, microbiologists and engineers is available to offer product and process consultation. STERIS's Technical Services Team currently provides both on- and off-site seminars with topics focusing on process cleaning and cleaning validation. An extensive library of technical data, laboratory reports, analytical methods and case studies have been developed including toxicity and substrate compatibility studies.

### Common Applications

STERIS Pharmaceutical Detergents deliver unmatched performance in the following critical applications:

- CIP cleaning of large vessels and process piping
- COP cleaning in pharmaceutical washers, recirculation baths and ultrasonic tanks
- Manual cleaning of complex equipment with sensitive substrates
- Rouge removal, Biofilm and passivation of stainless steel process equipment
- Biofilm remediation of process equipment

STERIS Pharmaceutical Detergents are designed for your most difficult cleaning challenges. They employ multiple cleaning mechanisms such as wetting, solubility, dispersion, emulsification, hydrolysis and oxidation which work together to penetrate, dissolve and rinse away process residues. Each product is supported by our industry-leading, Technical Support team as well as an extensive documentation package to help facilitate cleaning validation.

## Alkaline Detergents

Alkaline Detergents are used for the majority of cleaning applications due to their ability to penetrate and efficiently remove a wide range of organic residues.

### **CIP 100™ Alkaline Process and Research Cleaner**

- Formulated for a broad range of residues and applications

### **CIP 130 Process Cleaning Detergent**

- Formulated with a multiple surfactant system

### **CIP 150™ Alkaline Process and Research Cleaner**

- Formulated with an oxidizing agent

### **CIP Neutralizer Alkaline Based Neutralizer**

- Increases the pH of a solution

### **Foam 140® Alkaline Process and Research Cleaner**

- Produces heavy foam with spray applicator

### **ProKlenz® 120 Mild Alkaline Detergent**

- Formulated for enhanced substrate compatibility

### **ProKlenz® ONE**

- Formulated for a broad range of residues and applications
- Registered disinfectant and virucide
- Alkaline detergent for removal of biofilm

### **ProKlenz® FOAM High Performance Alkaline Cleaner**

- High foaming product for manual cleaning application

## Acid Detergents

Acid Detergents are commonly used for the removal of inorganic residues and salts. Additionally, they are widely used for rouge removal and passivation of stainless steel equipment.

### **CIP 200™ Acid-Based Cleaner and Disinfectant**

- Phosphoric acid formulation
- Registered disinfectant and virucide

### **CIP 220™ Acid-Based Process and Research Cleaner**

- Organic acid formulation

### **Foam 240® Acid-Based Process and Research Cleaner**

- Produces heavy foam with spray applicator

### **ProKlenz® TWO Acid Cleaner and Disinfectant**

- Formulated for rouge removal and passivation
- Registered disinfectant

### **ProKlenz® RESTORE High Performance Acid-Based Cleaner**

- Acid-based cleaner for type I rouge removal

## Neutral Detergents

Neutral Detergents are commonly used in manual cleaning applications or with sensitive substrates due to their mild pH and enhanced compatibility. They may also be used to enhance the performance of other detergents.

### **DA-7645™ Process and Research Cleaner**

- Formulated for manual cleaning

### **CIP 300™ Neutral pH Process and Research Cleaner**

- Surfactant based formulation

### **CIP Additive™ Detergent Booster and Defoamer**

- Surfactant based formulation

### **ProKlenz® Booster High Performance Detergent Additive**

- Surfactant based formulation with oxidizing agent

### **ProKlenz® NpH High Performance Neutral Process and Research Cleaner**

- Surfactant and solvent based formulation

