

**Chemical Solution Provider**  
*In Pharma Industry*



**BICLEAN™**

Process Cleaning Detergents



# BiOCS

was established with the vision to be the best chemical solution provider in the recent growing pharmaceutical and biopharmaceutical market globally.

Since its establishment, BiOCS has developed the specially formulated alkaline and acid-based detergents used for CIP (Clean-in-Place), COP (Clean-out-of-Place) and manual cleaning in the biopharmaceutical industry, to assure customer satisfaction, from perfect quality management with GMP grade level production facility and analysis equipment to documentation required by the pharmaceutical customers.

Also, BiOCS has the thermal insulation product, with melamine foam for pipes and fittings in various shapes and sizes for pharmaceutical and biopharmaceutical industry. BiOCS has the reference case of applying the valve insulation as well.

As a Chemical Solution Provider in pharma industry, BiOCS keeps putting its best effort in research and development not only for expanding its business in the field but also becoming the best partner to the customers in the pharmaceutical and biopharmaceutical industry.





## Process Cleaning Detergents

**BiCLEAN™** Cleaning Detergents are specifically designed for process cleaning of pharmaceutical & biopharmaceutical applications using multiple cleaning mechanisms.

BiCLEAN™ is mainly used for the Clean-in-Place (CIP) by immersion, circulation or by spraying of internal or external surfaces of tanks and other production equipment of pharmaceutical & biopharmaceutical products.

BiCLEAN™ Cleaning detergents allow the cleaning of mixers, fermentors, bioreactors, tubes, tablet presses and all types of surfaces, especially stainless steel, in contact with intermediates or end products.

BiCLEAN™ Cleaning Detergents assure the removal of insoluble residues, oils, chemical solutions, proteins, fats, silicone and other substances that are difficult to clean.

## BiCLEAN™ Description

BiOCS is producing two types of cleaning detergents ; **alkaline detergent, BiCLEAN™ - B1.0** and **acid-based detergent, BiCLEAN™ - A1.0**.

**BiCLEAN™ - B1.0** is highly concentrated **alkaline detergent** formulated with potassium hydroxide, chelating agents, and other ingredients. It reduces water consumption and cleaning time due to superior rinsing and low foaming characteristics.

BiCLEAN™ - B1.0 penetrates, dissolves, and removes a wide range of organic soils, including process residues and is ideal for Clean-in-Place(CIP) and Clean-out-of-Place(COP).

**BiCLEAN™ - A1.0** is an **acid-based detergent** formulated with phosphoric acid, citric acid and other ingredients. It is also designed for low foaming at all temperatures and for easy rinsing off.

BiCLEAN™ - A1.0 is mainly used for removal of inorganic soils and generally effective for removal of rouge and for passivation.

# BICLEAN™ – B1.0

## Alkaline Detergent

BICLEAN™ - B1.0 is an alkaline detergent formulated mainly with potassium hydroxide and is used for CIP process in the pharmaceutical and biopharmaceutical industry. It reduces water consumption and cleaning time due to superior rinsing and low foaming.



## Features

- Highly concentrated alkaline detergent formulated with potassium hydroxide and other ingredients. So it must be diluted with water before use
- Low foaming at all temperatures
- Easy Rinse off

## Benefits

- Penetrates, dissolves, and removes a wide range of soils using multiple cleaning mechanisms
- Effective for cleaning organic soils
- Easily removed from the product contact surfaces; Saves time and utility consumption

### Physical Properties:

- Form ..... Light yellow, clear liquid
- pH (1% w/w solution) ..... 12.5 typical
- Specific Gravity (25°) ..... 1.26 typical
- Solubility ..... Complete
- Foam ..... Low
- Rinsing ..... Excellent

### Applications:

- Processing Equipment
  - Process vessels
  - Reactors
  - Blenders
- Component Parts
- Glassware washing
- Ultrasonic cleaning

### Ordering Information:

- 1,000L IBC Tank
- 20L Plastic Pail

# **BiCLEAN™ – A1.0**

## **Acid Detergent**

BiCLEAN™ - A1.0 is an acid-based detergent formulated mainly with phosphoric acid and is used for Clean-in-Place (CIP) and Clean-out-of-Place (COP) process in the pharmaceutical and biopharmaceutical industry.



## **Features**

- Highly concentrated acid detergent formulated with phosphoric acid and other ingredients. So it must be diluted with water before use
- Low foaming at all temperatures
- Easy rinse off

## **Benefits**

- Removes a wide range of process residues using multiple cleaning mechanisms
- Effective for cleaning inorganic soils
- Also effective for passivation and removal of rouge.
- Easily removed from the product contact surfaces; Saves time and utility consumption

### **Physical Properties:**

- Form ..... Colorless, clear liquid
- pH (1% w/w solution) ..... 1.8 typical
- Specific Gravity (25°) ..... 1.33 typical
- Solubility ..... Complete
- Foam ..... Low & controlled
- Rinsing ..... Excellent

### **Applications:**

- Processing Equipment
  - Process vessels
  - Reactors
  - Blenders
- Component Parts
- Glassware washing
- Ultrasonic cleaning

### **Ordering Information:**

- 1,000L IBC Tank
- 20L Plastic Pail

## Research & Laboratory

BiOCS developed cleaning process detergents; BiCLEAN™ and will steadily be dedicated in developing chemical solutions for the pharmaceutical and biopharmaceutical industry, and will endlessly challenge ourselves to accomplish new products through continuous research and development.



**Analytical Equipment** Quality System capable of performing all tests from cleanliness management to product ingredient analysis (Possession of more than 30 measurement equipment)

Lab Equipment	
Thermo Fisher ICP	
Thermo Fisher UHPLC	
Mettler Toledo Titrator	
Thermo Fisher HPIC	
Sievers TOC Analyzer	
Konica Minolta Spectrophotometer	

# Manufacturing and Processing

- ISO9001:2015 & ISO14001:2015 certified
- Meets the highest standard in manufacturing and processing
- Complete lot traceability; Supports QA & QC

## Certificates



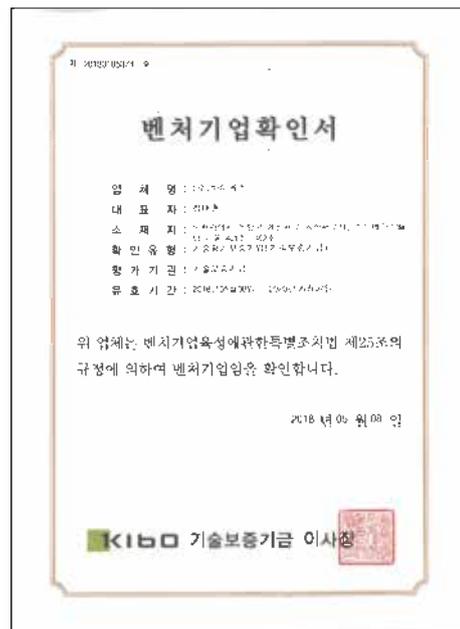
ISO9001:2015



ISO14001:2015



R&D Center



Venture Company

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