



MP Biomedicals, LLC

29525 Fountain Parkway  
Solon, Ohio 44139

Telephone: 440/337-1200  
Toll Free: 800/854-0530  
Fax: 440/337-1180  
mailto: [biotech@mpbio.com](mailto:biotech@mpbio.com)  
web: <http://www.mpbio.com>

## TECHNICAL INFORMATION

Catalog Number: 76670, 76671, 76674, 76675, 7667093, 7667094, 7667095, 7667098, 7667126, 7667121, 7667125, 7667128, 7667129, 7667193, 7667194, 7667195, 7667198, 7667493, 7667494, 7667495, 7667498, 7667526, 7667521, 7667525, 7667528, 7667529, 7667593, 7667594, 7667595, 7667598, 7668093, 76680RF, 7668493, 76684RF

### 7X Cleaning Solutions

#### Introduction

7X cleaning solutions (7X, ES 7X, 7X PF, O-Matics) were developed for safe and effective cleaning of laboratory instruments and glassware. ES 7X (7X PF in Europe) solutions are an environmentally safe form of the original 7X formula, since they are completely free of phosphate and are biodegradable through normal environmental action.

7X solutions are immediately and completely soluble in water at any concentration, without agitation. With normal detergents the precipitation of solids on cleaned surfaces is a major problem. The powerful dispersing agents in the 7X solutions work to reduce agglomerates to individual particles and hold them in suspension so that they are not redeposited on the surfaces being cleaned. 7X solutions are a powerful wetting agent which will penetrate and clean minute crevices not accessible to ordinary cleaners.

Laboratory equipment and glassware washed in any of the 7X solutions drain completely in a few seconds. Solutions which do not drain quickly can allow molecules of solute to be deposited on the washed surface to the extent that a visible film is present. Such deposits can affect critical experimental work.

7X cleaning solutions are compatible with alkalis and acids. The pH is near normal and varies only minimally with the concentration. The neutral pH levels will not induce etching of delicate glassware, thereby reducing weight loss and premature breakage.

7X cleaning solutions should be of particular value in cell culture laboratories where any trace of chemical contamination can interfere with the growth of cell cultures in tubes or flasks.

#### Applications

7X cleaning solutions have been developed for use whenever a high degree of cleanliness is required. Test tubes, petri-dishes, flasks, cylinders, burettes, pipettes, slide cover glasses, hypodermic syringes and all other types of laboratory glassware and surgical instruments can be cleaned with 7X solutions. Whenever critical cleaning procedures are involved, the use of 7X solutions are indicated.

The 7X-O-Matic solutions (both the original and phosphate free) have been formulated to provide a low-foaming concentrated surfactant. They are especially suitable for automatic washing machines, or in applications where the cleaning solution is agitated during cleaning. They are effective at temperature ranging from ambient to 85°C.

#### Composition

7X Cleaning Solutions are a concentrated liquid, made up of anionic surface active agent and special solvents.

7X and 7X-O-Matic solutions have alkaline salts, such as complex phosphates, added as builders.

Phosphate Free 7X-O-Matic is a highly concentrated solution containing a unique non-ionic surfactant stabilized and buffered to give optimum efficiency.

#### Storage

All 7X Cleaning Solutions have an indefinite shelf life in their original containers, at room temperature.

#### Directions

##### *7X Original Formula*

##### *ES 7X (7X PF) Phosphate-Free*

– For lightly soiled items, prepare a 1% solution in tap water and soak items 2 - 3 hours or overnight, depending on the use. To increase the effectiveness of the cleaning solution, submerged items can be autoclaved or boiled. For heavily soiled items, increase the concentration to 3% or 5%. Gentle scrubbing with a soft brush may also be effective.

– Drain the used solution.

– Rinse several times with tap water.

– Final-rinse using distilled water.

– Place cleaned items on clean bench-paper and allow to air dry.

##### *7X-O-Matic Original Formula*

##### *ES 7X-O-Matic (7X-PF-O-Matic) Phosphate-Free*

– For lightly soiled items, prepare a 0.25% to 1% solution, depending on the type and amount of soil on the labware.

– Use in a washer having a temperature of 48°C to 71°C (120°F to 160°F).

– For heavily soiled items, an overnight soak in a 3% to 5% solution of 7X or ES 7X (7X-PF) followed by a machine-wash cycle in 7X-O-Matic or ES 7X-O-Matic (7X-PF-O-Matic) will be highly effective.

#### Caution

In case of eye contact, immediately flush eyes with clean water for at least 15 minutes and get attention promptly. Complete

information is supplied with the MSDS (Material Safety Data Sheet).

**Ordering Information**

MP offers 7X products in several different sizes to meet your needs. Larger sizes offer greater value. For large-volume orders or special sizes, please call MP for special pricing and availability.

**Catalog Number**

**Size**

*7X Detergent*

7667093	1 Gallon
7667094	4 x 1 Gallon
7667095	5 Gallons
7667098	55 Gallons

*ES 7X (7X PF) Phosphate-Free*

7667126	1 liter
7667121	2 x 5 liters
7667125	9 x 1 liters
7667128	25 liters
7667129	200 liters
7667193	1 gallon
7667194	4 x 1 gallon
7667195	5 gallons
7667198	55 gallons

*7X-O-Matic*

7667493	1 gallon
7667494	4 x 1 gallon
7667495	5 gallons
7667498	55 gallons

*ES 7X-O-Matic ( 7X-PF-O-Matic ) Phosphate-Free*

7667526	1 liter
7667521	2 x 5 liters
7667525	9 x 1 liter
7667528	25 liters
7667529	200 liters
7667593	1 gallon
7667594	4 x 1 gallon
7667595	5 gallons
7667598	55 gallons

**Accessories**

**Catalog Number**

**Product**

**Description**

7663000	7X Meter Mixer Kit	Allows automatic dilution of 7X products through a hook-up with a water spigot.
9941431	"Quick-Serve" Faucet	Attaches to 1 gallon and 5 liter 7X containers for convenient dispensing
9312127	Spigot/Tap	Taps into the cap of 5 gallon 7X containers to provide a spigot for easy dispensing.