## Pluronic® F-127 \* Cell Culture Tested \*

# Ordering Information Storage Conditions

Product Number: 20050 (10 g)

Store at Room Temperature \*DO NOT FREEZE\*
Expiration date is 12 months from the date of receipt

#### **Introduction**

Pluronic® F-127 is a nonionic surfactant that is 100% active and relatively non-toxic to cells at low concentrations, and frequently used with dye AM esters such as Indo-1 AM, Fura-2 AM, Calcein AM, Fluo-3 AM, Fluo-4 AM, Quest Fluo-8<sup>TM</sup> AM and Quest Rhod-4<sup>TM</sup> AM, etc. to improve their water solubility. Pluronic® F-127 may also be useful for dispersing other lipophilic probes. Appropriate controls should be performed to make certain that Pluronic® F-127 is not altering the membrane properties of the cells. For the convenience, we also offer 20% Pluronic® F-127 DMSO solution (Cat. # 20052) and 10% Pluronic® F-127 water solution (Cat. # 20053).

## **Chemical and Physical Properties**

Molecular Weight: ~ 12,500 Solvents: water or DMSO

### **Guidelines for Use**

Note: Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs.

- 1. Dissolve 1 g of Pluronic® F-127 in 10 mL distilled water to make a 10% (w/v) stock solution, or 2 g of Pluronic® F-127 in 10 mL of anhydrous dimethyl sulfoxide (DMSO) to make a 20% (w/v) stock solution. These may require heating from 40 to 50 °C for about 30 minutes. Store solution at room temperature.
  - Note: Do not refrigerate or freeze the Pluronic® F-127 solution since it may precipitate. If precipitation is observed, the precipitates can be dissolved by heating to 37 °C and vortexing before use.
- 2. Dilute the 10% or 20% Pluronic® F-127 stock solution (from Step 1) into the cell-loading buffer such as Hanks and 20 mM Hepes buffer (HHBS) at 1:1000 to 1:500 dilution to achieve a 0.02 to 0.04% working solution.
- 3. The DMSO stock solution of AM ester is then diluted into the 0.02 to 0.04% working solution (from Step 2) to achieve a final AM ester concentration between 1  $\mu$ M and 10  $\mu$ M.
  - *Note: The final concentration of Pluronic*® *F-127 is normally kept at or below 0.08%.*
- 4. The cells are incubated at a desired temperature for between 10 minutes and 1 hour.
  - Note: In general it is desirable to use the minimum amount of AM ester needed to achieve adequate fluorescence signal to noise levels.
- 5. After labeling, the cells are washed with HHBS or fresh medium before starting the experiment.

**Disclaimer:** This product is for research use only and is not intended for therapeutic or diagnostic application. Please contact our technical service representative for more information.