PEGDA

POLYETHYLENE GLYCOL DIACRYLATE 3500 MW

Catalog Number **#GS700, GS705, GS711**

OVERVIEW

PEGDA (poly ethylene glycol diacrylate, Mw=3350) is packaged in bulk, dry, non-sterile form.

STORAGE

PEGDA: Store PEGDA in the original vial unopened at -20°C for up to one year. Reconstituted PEGDA solutions can be stored at -20°C for ~ one month.

Note: When altering this protocol gelation time and hydrogel stiffness vary depending upon the concentration of PEGDA, the concentration of PEGcure, and the duration of time exposed to UV radiation. Hydrogels made using only PEGDA and PEGcure will not support cell attachment.

INSTRUCTIONS FOR USE

PEGDA is prepared by dissolving the lyophilized solid in the DG Water; 1.0 mL of DG water yields a 10% (w/v) solution. PEGDA hydrogels (1 mL) should be prepared in the following manner:

1. Allow the PEGDA to come to room temperature.
2. Under aseptic conditions add 1.0 mL of DG Water to 100 mg of PEGDA vial for a 10% (w/v) solution.
3. Invert several times to dissolve. The solution will be clear and slightly viscous.
4. Add desired volume of photoinitiator to PEGDA. Place the vial on a rocker or shaker and allow solids to completely dissolve (approximately 10-20 minutes).
5. Keep solution protected from light until ready to crosslink. Pipette solution into desired format (i.e. 96 well plate) and photocrosslink.
6. Hydrogel properties may vary depending on time of exposure and type of light. Ensure the Photocrosslinking light is in close proximity to the hydrogel solution.
7. Freeze unused PEGDA solution at -20 °C and protected from light.