

PEG Aliquots (~25% PEG-Sil & ~0.25% Bio-PEG-Sil in dry DMSO)

Mixing PEG Powder

- 1- Weigh out 10 mg of Bio-PEG-Sil and add to 1 g of PEG-Sil.

DMSO handling and Mixing

- 2- Connect a balloon filled with N₂ to a bottle of dry DMSO.
- 3- Connect a syringe to the bottle of dry DMSO.
- 4- Remove the piston to allow N₂ flow for 30 s.
- 5- Extract 2.75 mL of DMSO.
- 6- Add DMSO to PEG powder and dissolve until solution is clear (Dissolving PEG is an endothermic process. Heating the solution helps to dissolve. Avoid sonication and use vortex if necessary)

Aliquots

- 7- Open ~36 microcentrifuge tubes, place them in a box.
- 8- Vent the tubes with N₂ to remove humidity.
- 9- Fill each tube with 105 uL of PEG/DMSO solution (each coverslip requires ~50 uL).

Storage

- 10- PEG powders are stored at -20 °C.
- 11- Store the 105 uL aliquots of PEG/DMSO in a closed box at -20 °C.

PEG-Sil: We usually purchase PEG-Sil in 1 g containers. It is convenient to use this container to prepare the solution.

Bio-PEG-Sil: We usually order PEG-Sil in 0.5 g containers. Aliquots of 10 and 100 mg should be made once received.