

Preparing the High Mass Range Calibration Solution

The high mass range calibrant is a solution of 3.5 mg/μL polypropylene glycol (PPG) in a solvent of 70:30 methanol/23 mM sodium acetate.

The high mass range calibration procedure is designed to work with a PPG that has an average molecular weight of approximately 2700 ($M_n \sim 2700$), which is Aldrich product number 202347. PPG 2700 is a viscous liquid. To order this compound from Sigma-Aldrich, write or call:

Sigma Chemical Company
P. O. Box 14508
St. Louis, Missouri U.S. 63178-9916
(800) 325-3010 (U.S.)
(905) 829-9500 (Canada)
(314) 771-3750 (outside the U.S. or Canada)
www.sigmaaldrich.com

❖ **To prepare the sodium acetate stock solution**

Dissolve 0.082 gm of sodium acetate in 10 mL of water in a clean 20 mL glass vial and label the container **Sodium Acetate Stock Solution**.

❖ **To prepare the PPG stock solution**

1. Dissolve 0.7 gm of PPG 2700 in 7 mL of methanol in a clean 20 mL glass vial.

Tip Because PPG 2700 is a viscous liquid, use a glass pipette to transfer 0.7 gm of the liquid into a weigh boat, or weigh the liquid directly into a minimum 20 mL glass vial.

2. Add 2.3 mL of water to the vial.
3. Add 0.7 mL of the sodium acetate stock solution and label the container **PPG 2700 Stock Solution (70 mg/mL)**.

❖ **To prepare the calibration solution**

1. Pipette 7 mL of methanol into a clean 20 mL glass vial.
2. Add 2.3 mL of water to the vial.
3. Add 700 μ L of the sodium acetate stock solution to the vial.
4. Add 10 μ L of the PPG 2700 stock solution and label the container **LXQ/LTQ XL PPG 2700 Calibration Solution (70 ng/ μ L)**.