6330 Hollister Avenue Santa Barbara, CA 93117 Tel: +1 (805) 681-9009 Fax: +1 (805) 681-0123 Web: www.wyatt.com

200 kDa PS Standard

Certificate of Analysis

Polystyrene Standard, 200 kDa

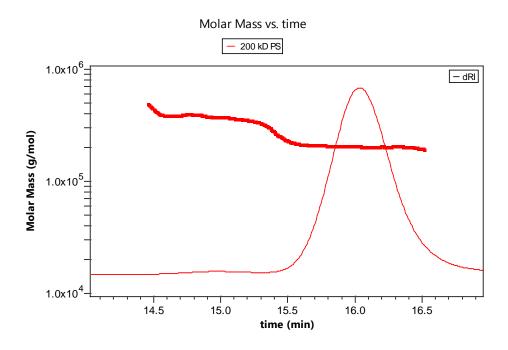
Wyatt PN: P8402-20001B

Batch #: 50912

Manufactured by Pressure Chemical Co.

Storage: Room Temperature

Expires: July 2022



Standard Characterization Data (including high MW peaks)

 $M_w = (206 \pm 2) \text{ kDa}$; PDI = 1.01 ± 0.01; $R_z = (17.3 \pm 0.2) \text{ nm}$ (by SEC-MALS in toluene, using dn/dc = 0.110 mL/g and $A_2 = 4.4 \text{e-}4 \text{ mol mL/g}^2$)

Intrinsic Viscosity $[\eta]_w = (75.5 \pm 0.5)$ mL/g; $[\eta]_z = (76.0 \pm 0.5)$ mL/g (by Wyatt ViscoStar following SEC-MALS)

Certification: _____ Michelle Chen_____ Date: March 20, 2018

Dr. Michelle Chen, Director of Analytical Services