

Application of Alcohols to Inhibit the Formation of Ca(II) Dodecyl Sulfate Precipitate in Aqueous Solutions

Supporting information

S1

Table S1. Viscosity (cP) and refractive index of the applied alcohol–water solvents

Solvent	Refractive index	Viscosity (cP)
water	1.330	0.8872
5.0 V/V% MeOH	1.336	1.163
10 V/V% MeOH	1.3372	1.243
20 V/V% MeOH	1.3385	1.368
5.0 V/V% EtOH	1.334	1.2
10 V/V% EtOH	1.3405	1.265
20 V/V% EtOH	1.3462	1.639
5.0 V/V% <i>n</i> -propanol	1.34	1.32
10 V/V% <i>n</i> -propanol	1.3425	1.324
20 V/V% <i>n</i> -propanol	1.3449	1.522
5.0 V/V% <i>n</i> -butanol	1.3392	1.059

S2

Correlation diagrams of dynamic light scattering measurements processed in alcohol containing media

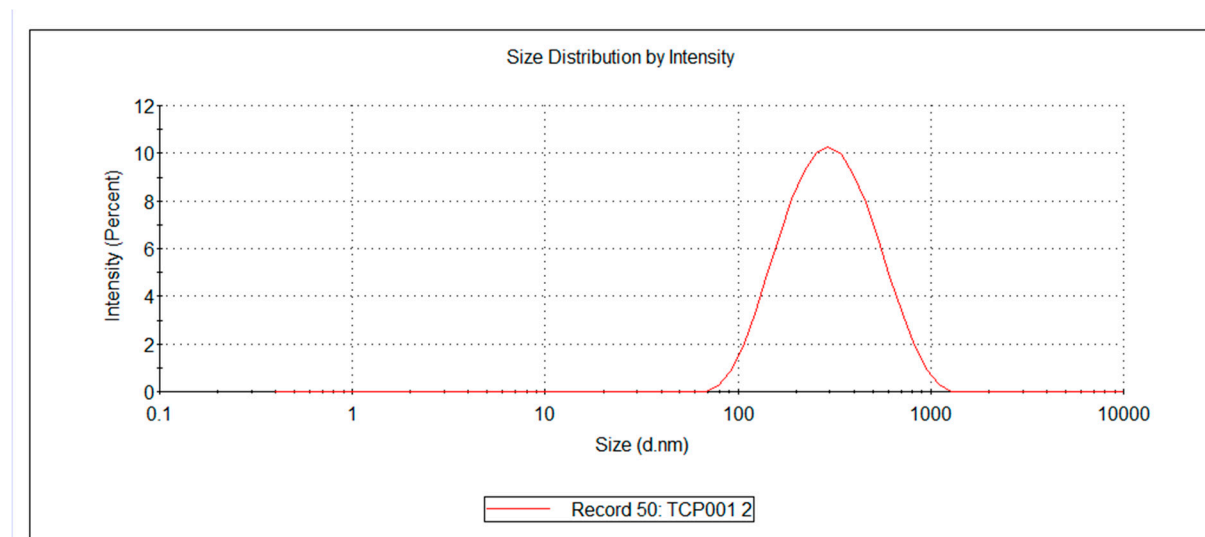


Figure S1. 0.1 g/L SDS

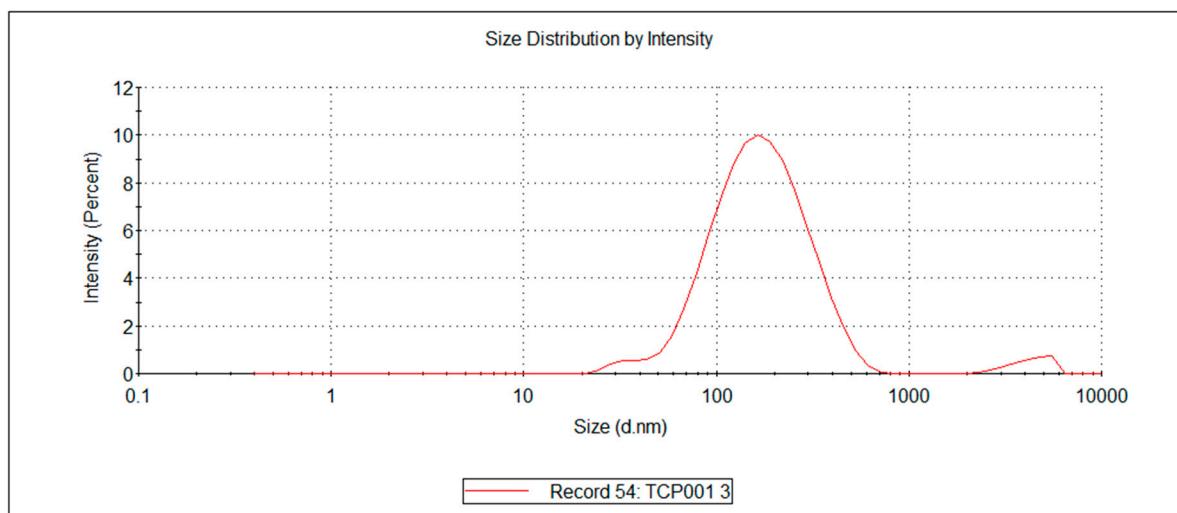


Figure S2. 0.5 g/L SDS

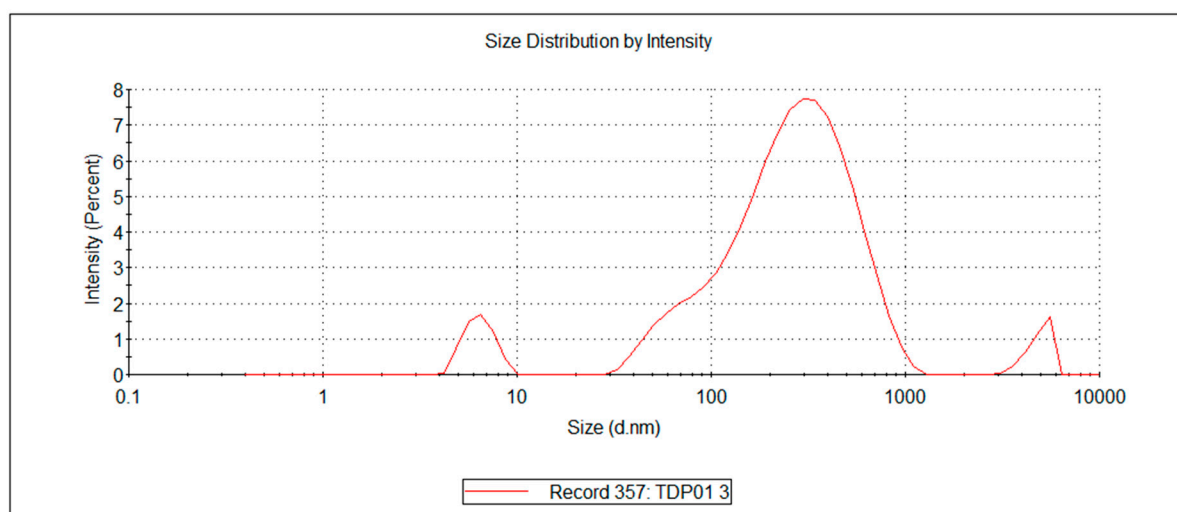


Figure S3. 1.0 g/L SDS

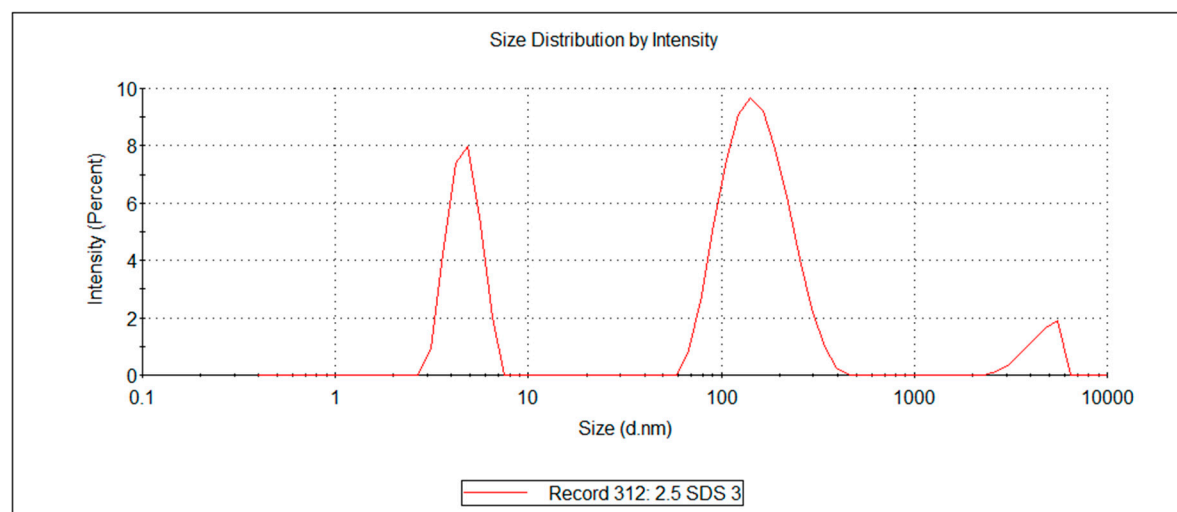


Figure S4. 2.5 g/L SDS

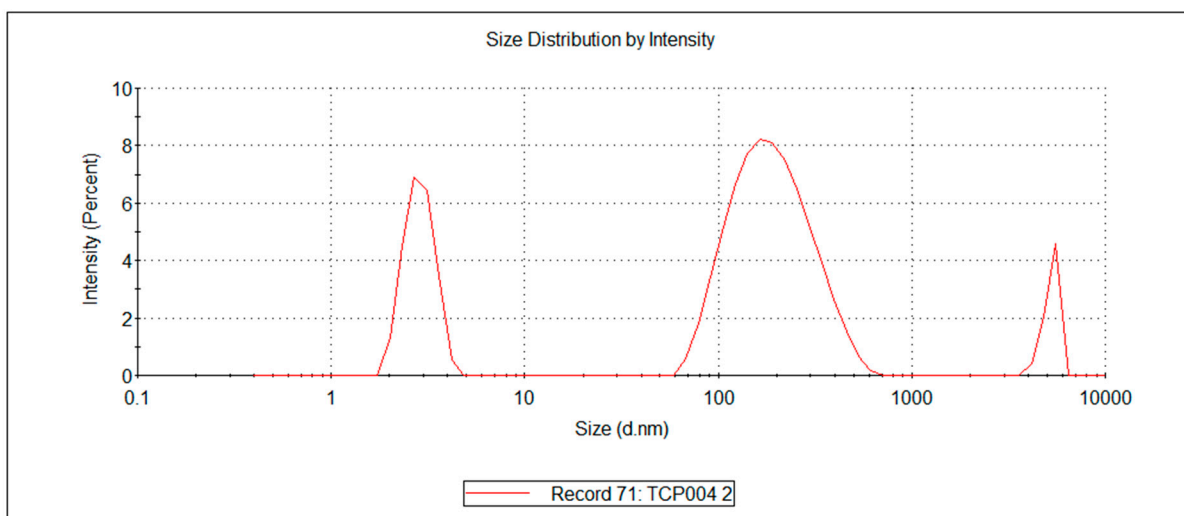


Figure S5. 5.0 g/L SDS

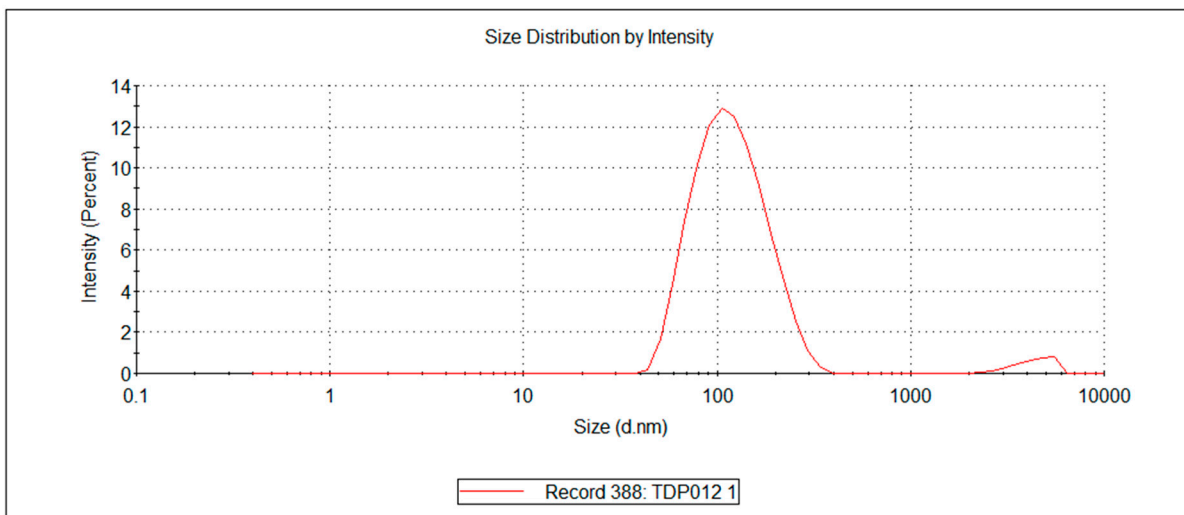


Figure S6 0.5 g/L SDS, 5.0 V/V% MeOH

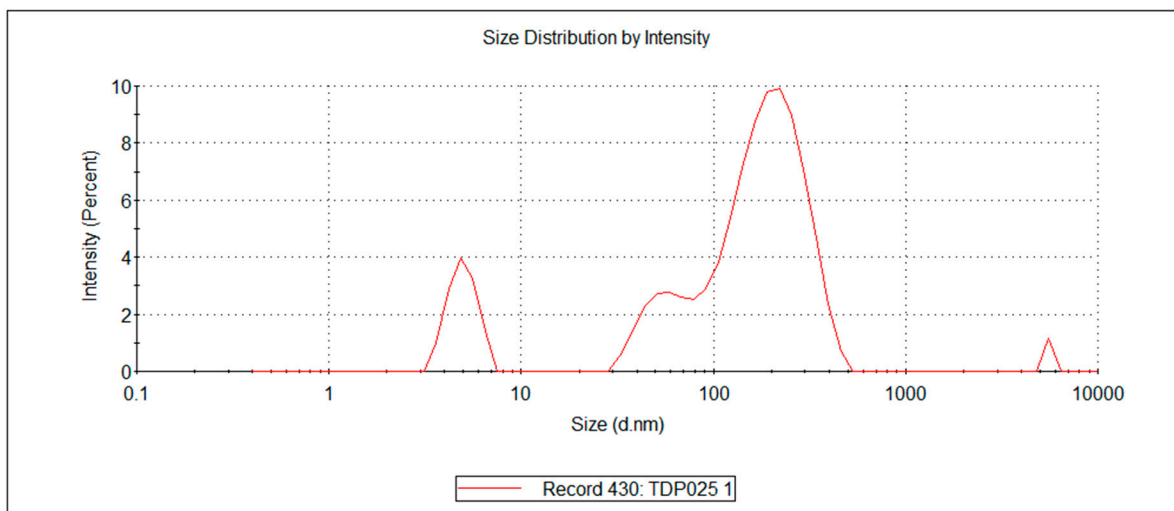


Figure S7. 1.0 g/L SDS, 5.0 V/V% MeOH

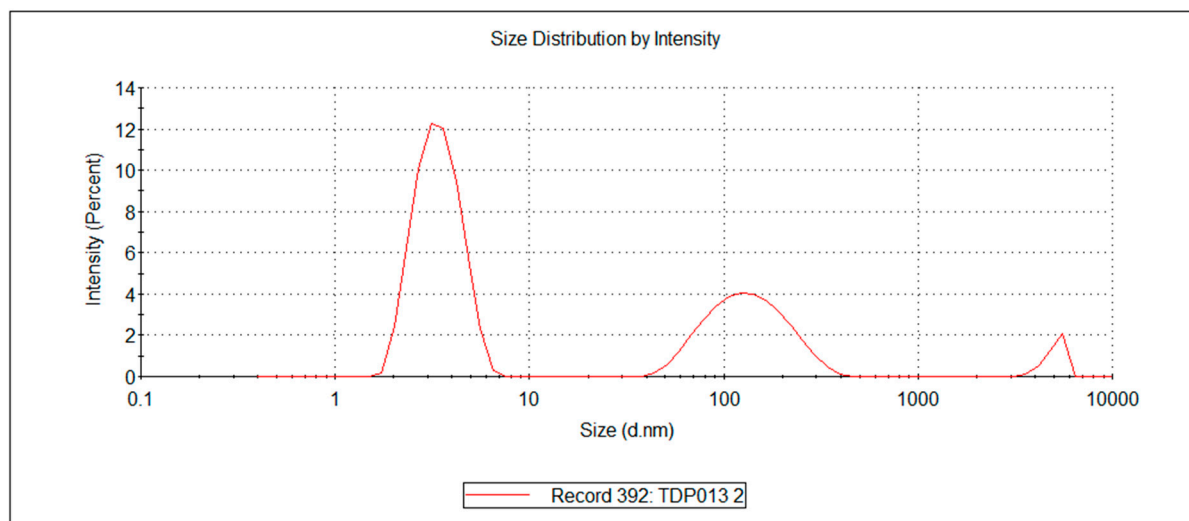


Figure S8. 2.5 g/L SDS, 5.0 V/V% MeOH

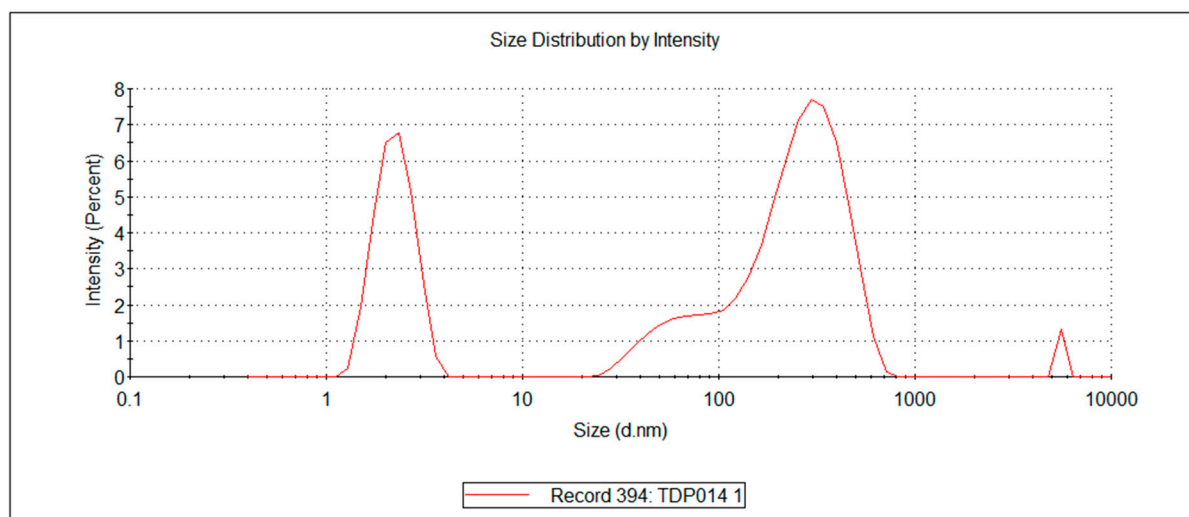


Figure S9. 5.0 g/L SDS, 5.0 V/V% MeOH

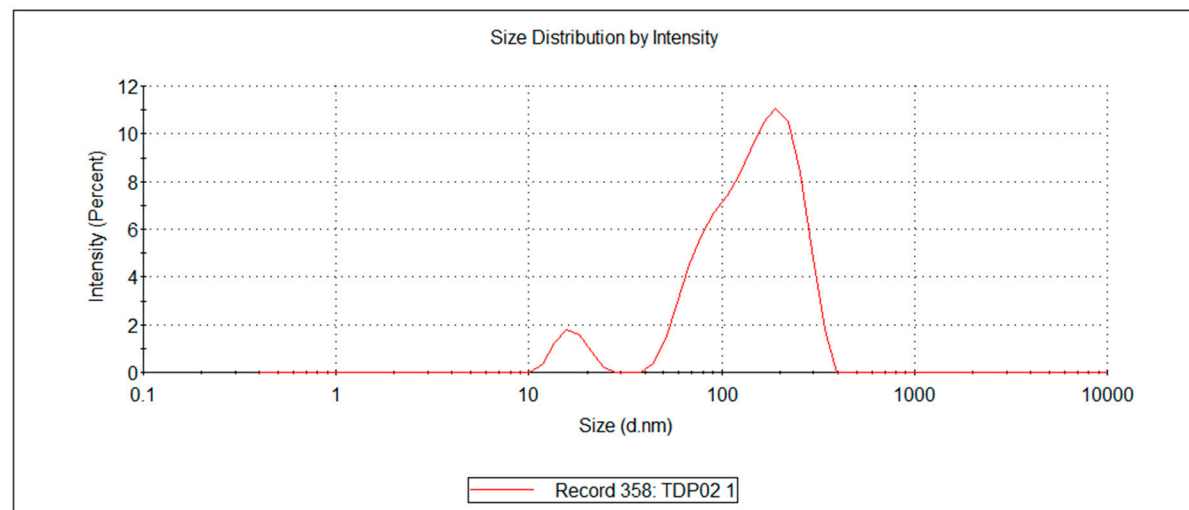


Figure S10. 0.5 g/L SDS, 5.0 V/V% MeOH

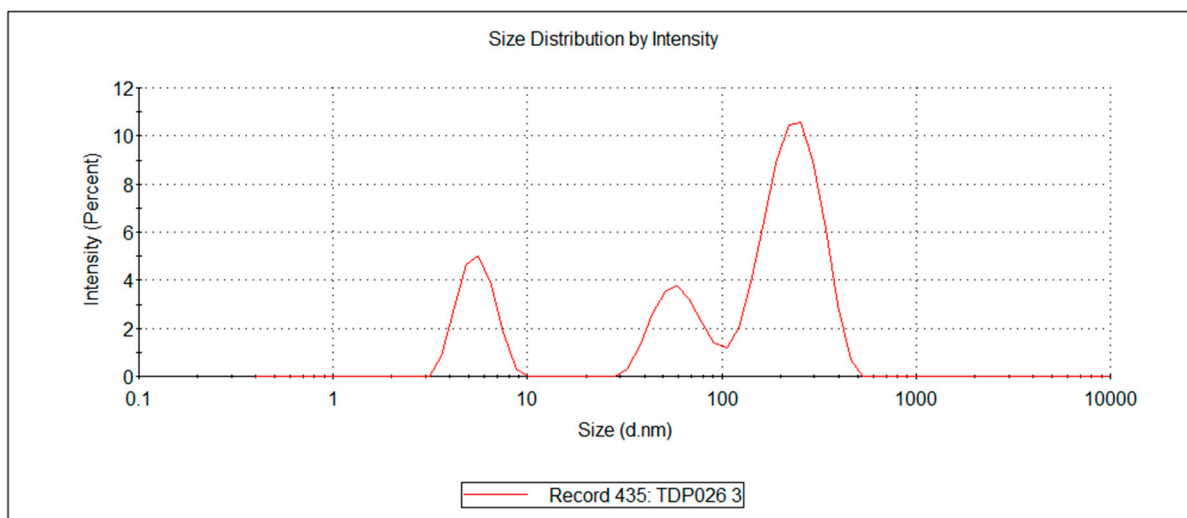


Figure S11. 1.0 g/L SDS, 10.0 V/V% MeOH

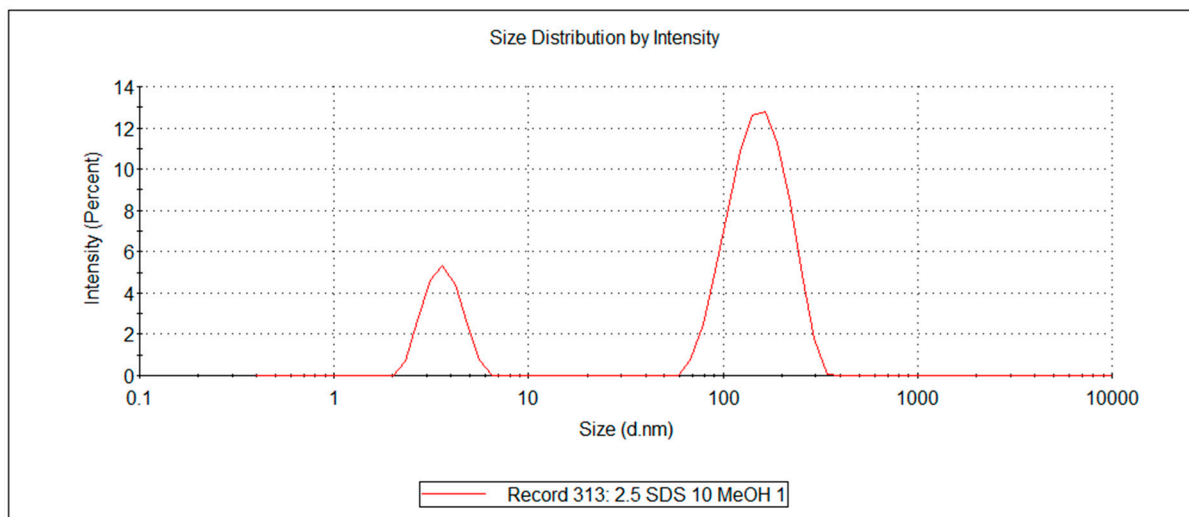


Figure S12. 2.5 g/L SDS, 10.0 V/V% MeOH

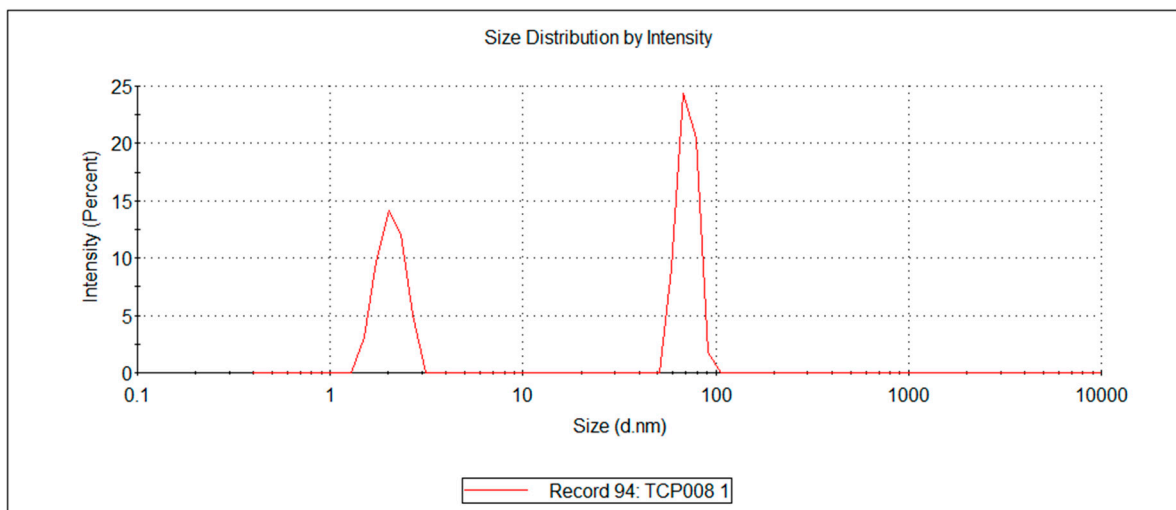


Figure S13. 5.0 g/L SDS, 10.0 V/V% MeOH

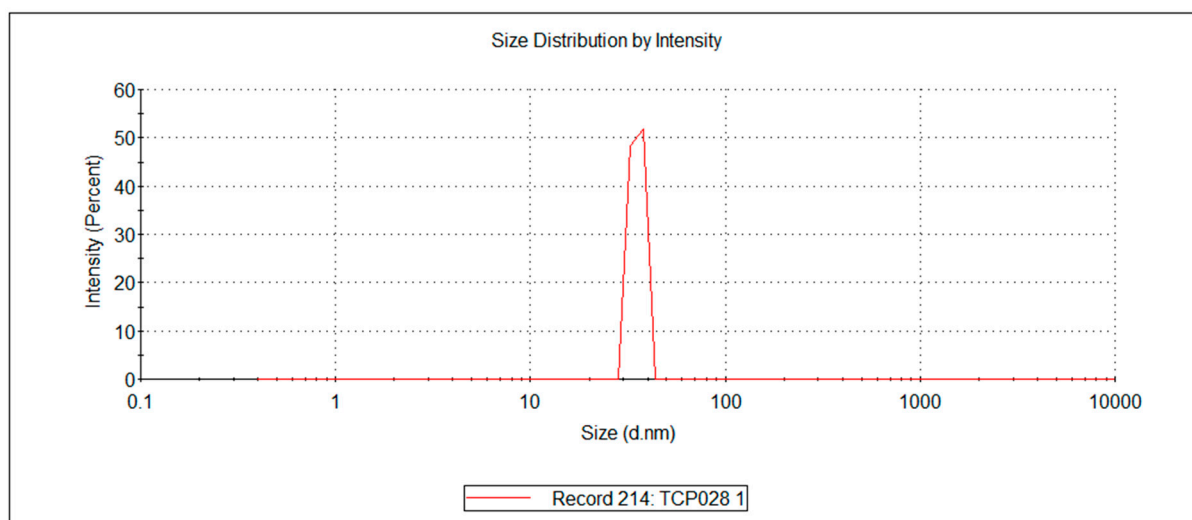


Figure S14. 0.5 g/L SDS, 20.0 V/V% MeOH

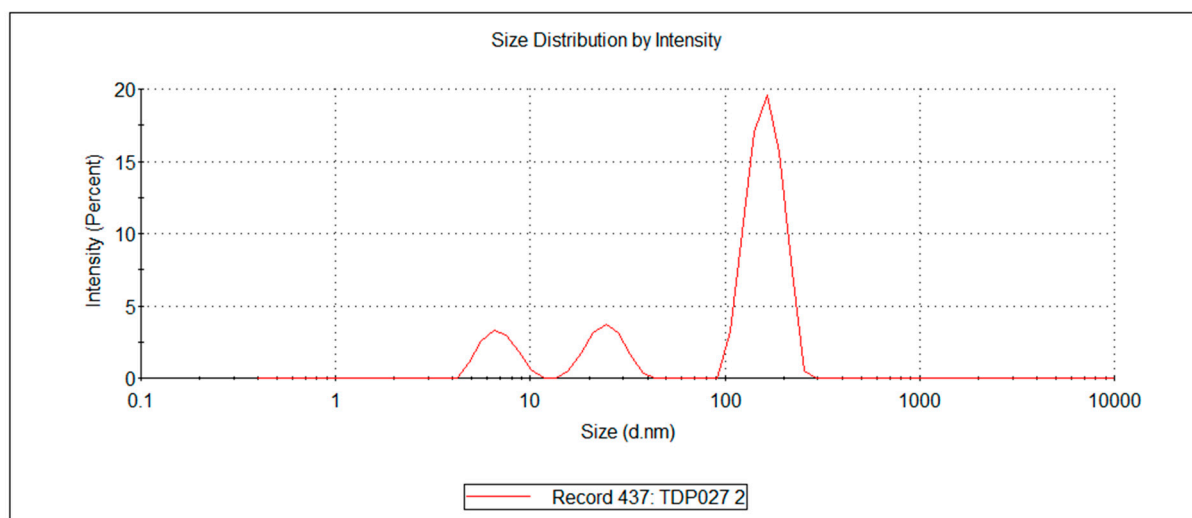


Figure S15. 1.0 g/L SDS, 20.0 V/V% MeOH

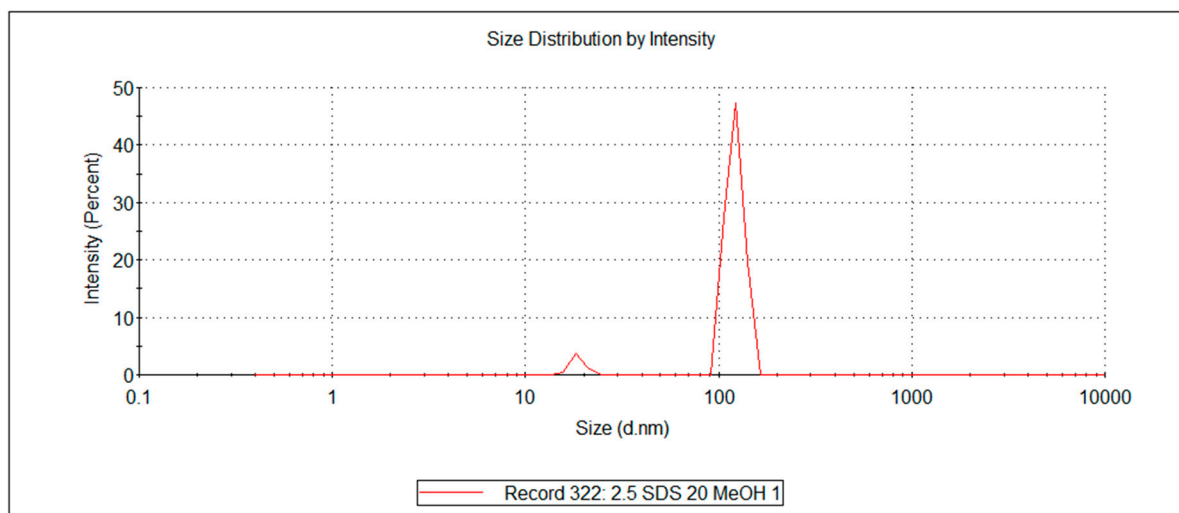


Figure S16. 2.5 g/L SDS, 20.0 V/V% MeOH

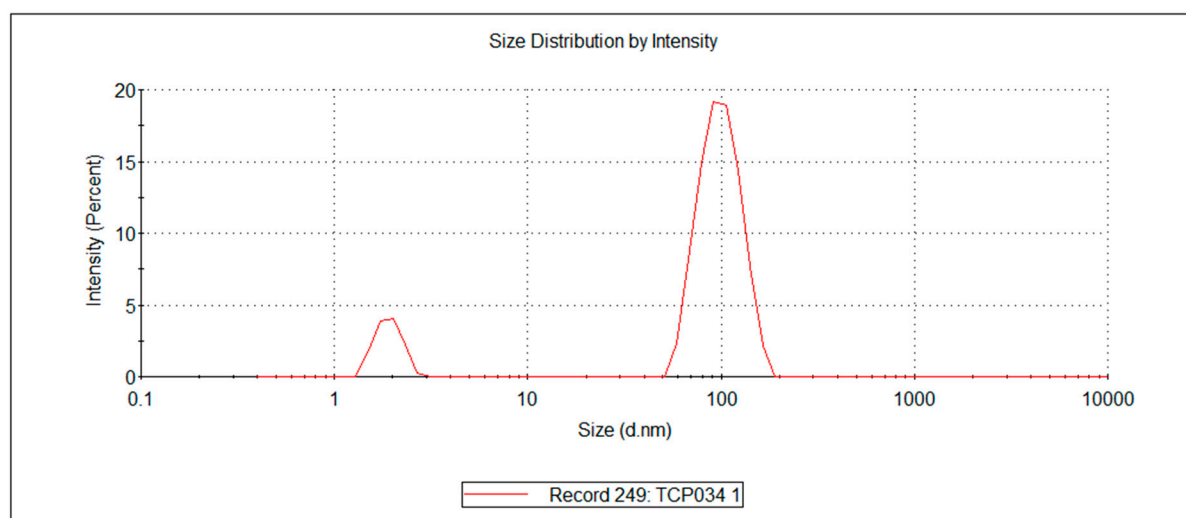


Figure S17. 5.0 g/L SDS, 20.0 V/V% MeOH

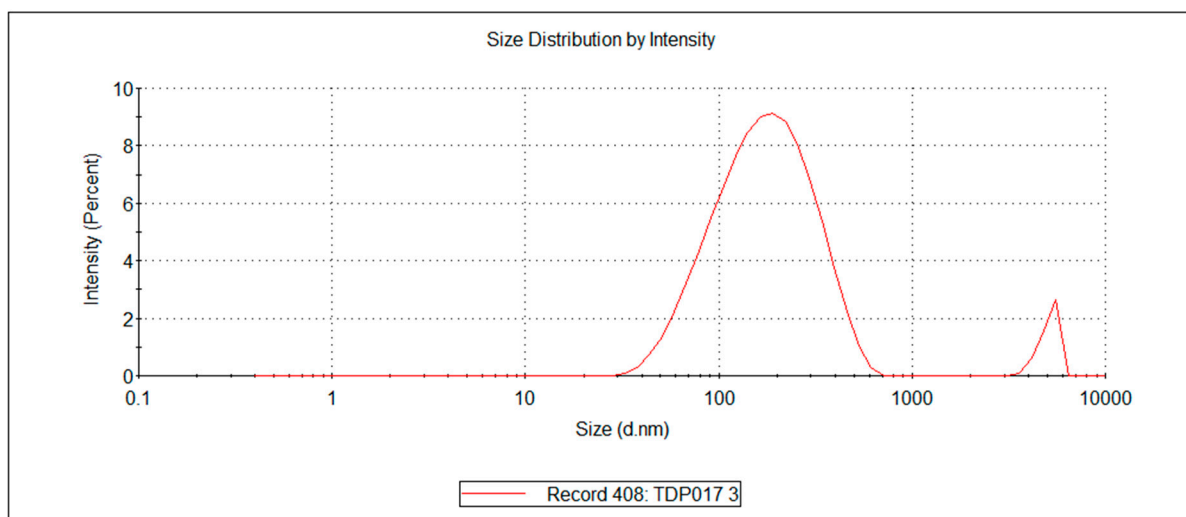


Figure S18. 0.5 g/L SDS, 5.0 V/V% EtOH

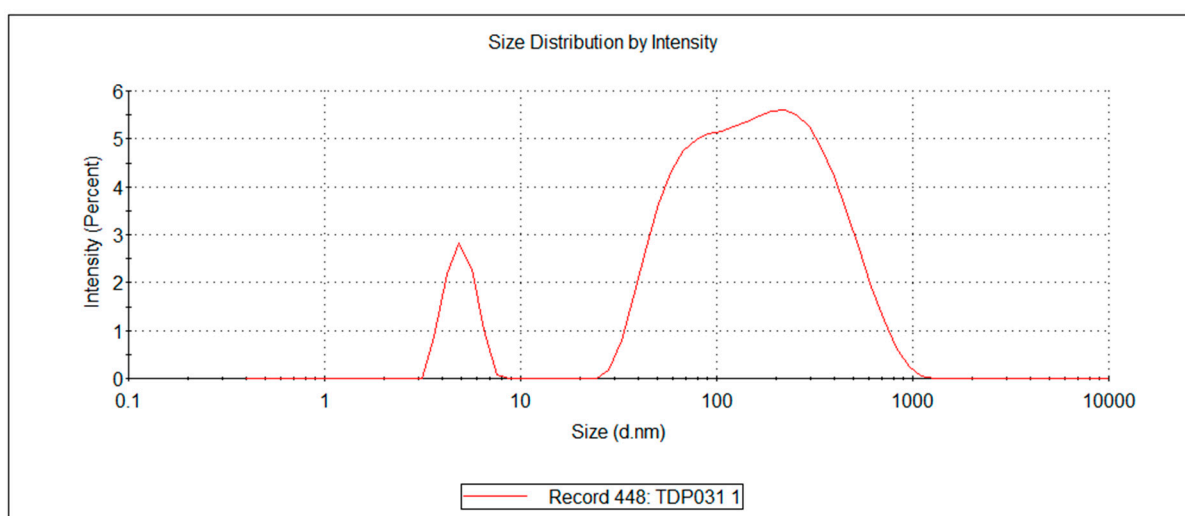


Figure S19. 1.0 g/L SDS, 5.0 V/V% EtOH

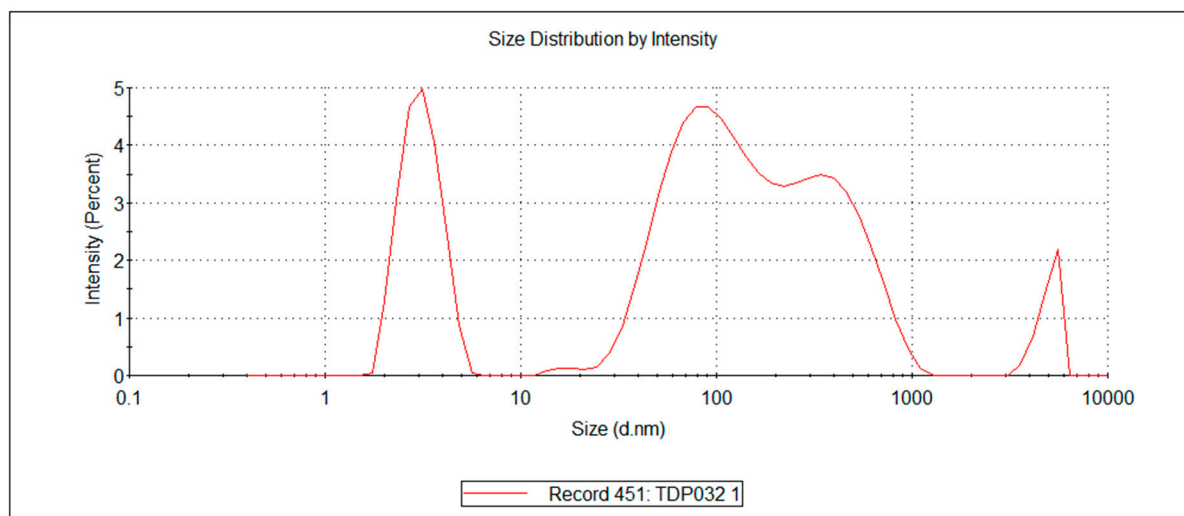


Figure S20. 2.5 g/L SDS, 5.0 V/V% EtOH

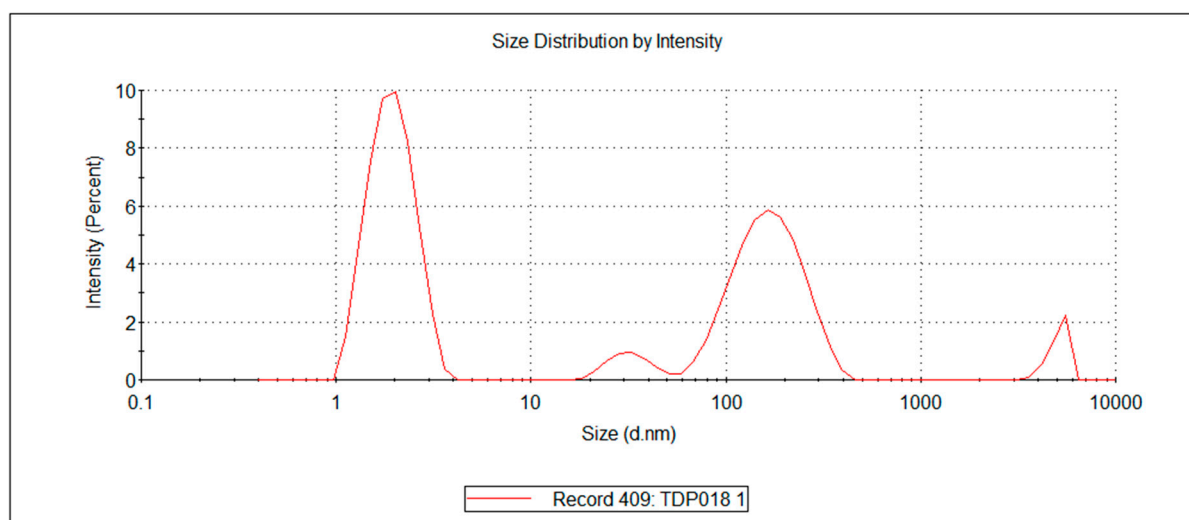


Figure S21. 5.0 g/L SDS, 5.0 V/V% EtOH

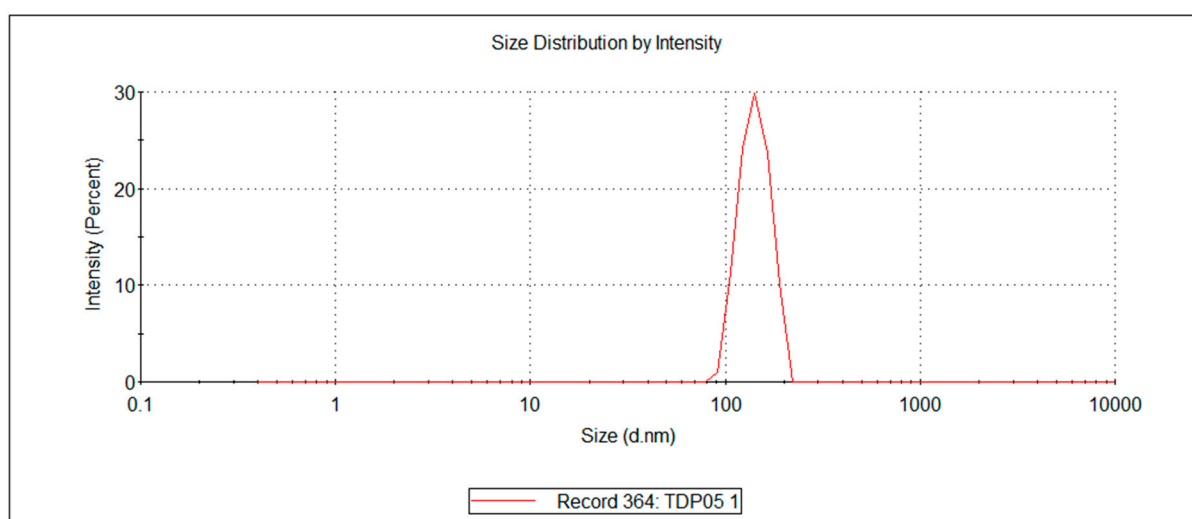


Figure S22. 0.5 g/L SDS, 10.0 V/V% EtOH

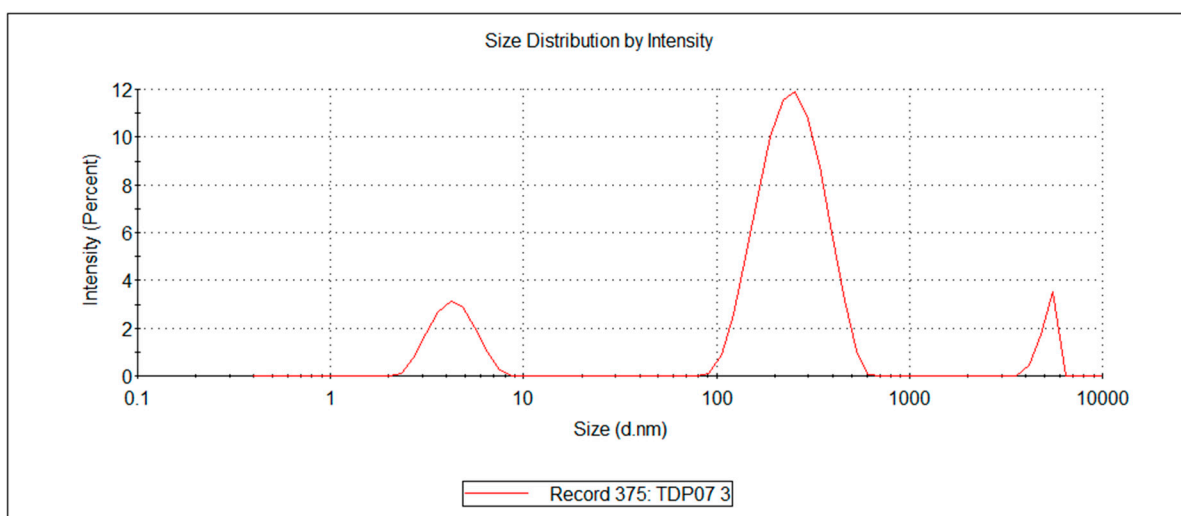


Figure S23. 1.0 g/L SDS, 10.0 V/V% EtOH

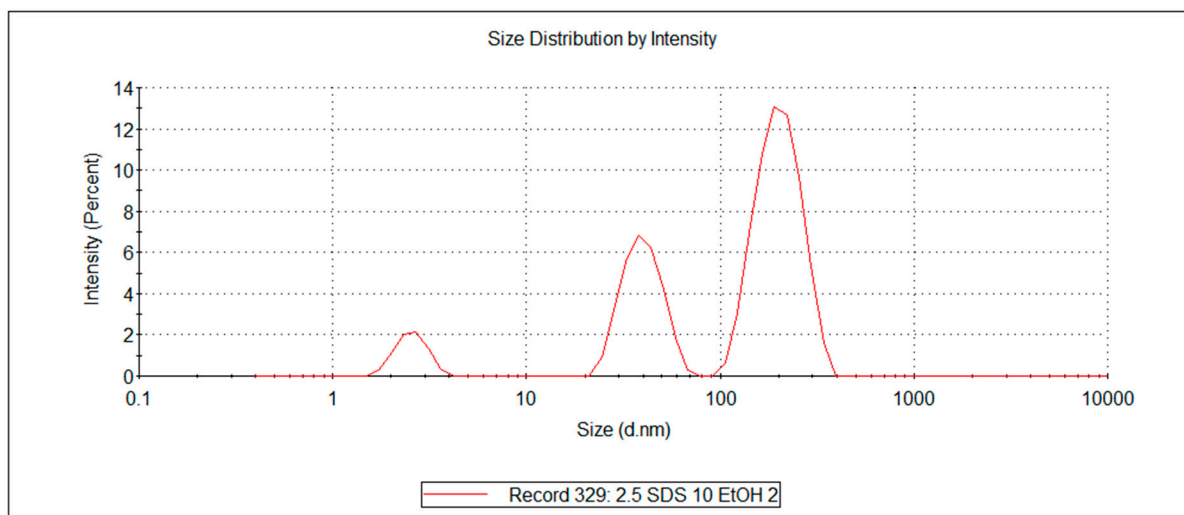


Figure S24. 2.5 g/L SDS, 10.0 V/V% EtOH

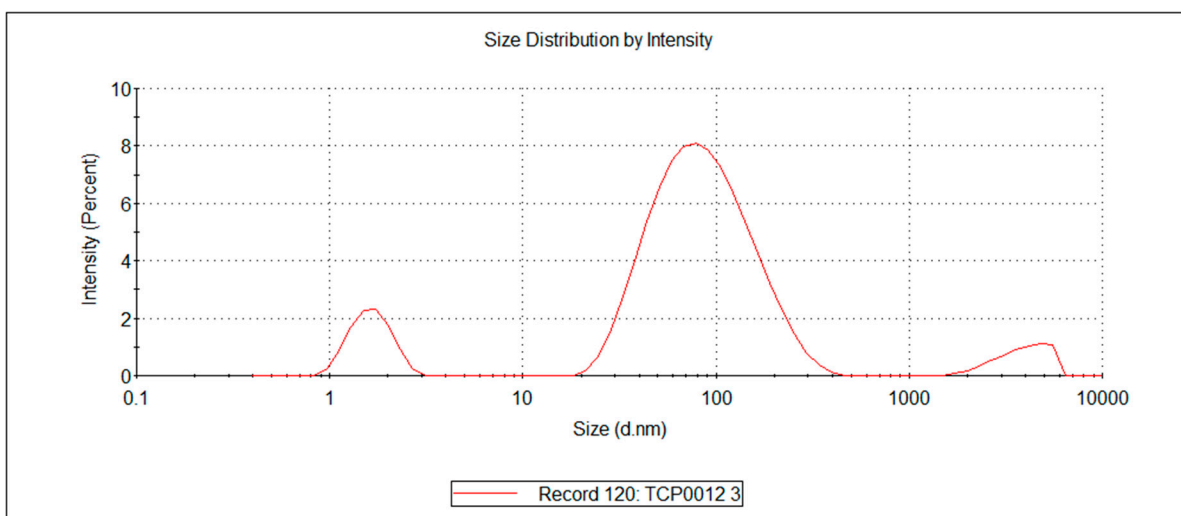


Figure S25. 5.0 g/L SDS, 10.0 V/V% EtOH

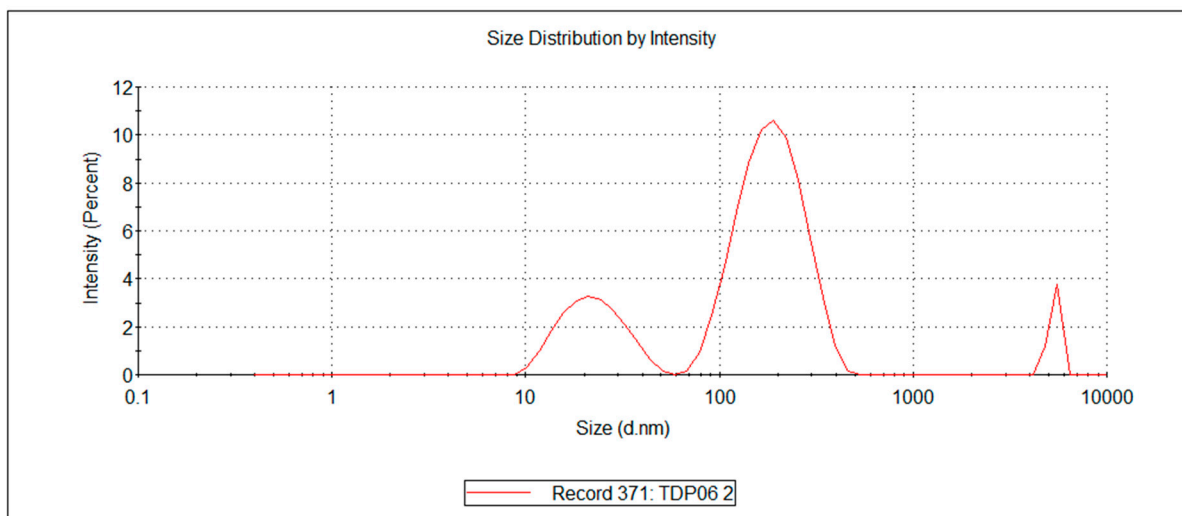


Figure S26. 0.5 g/L SDS, 20.0 V/V% EtOH

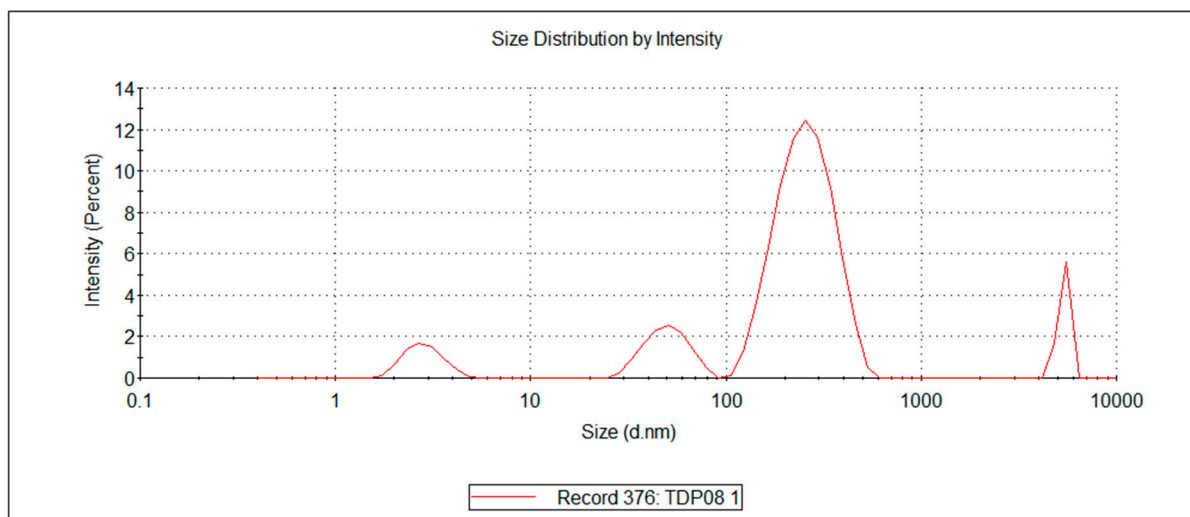


Figure S27. 1.0 g/L SDS, 20.0 V/V% EtOH

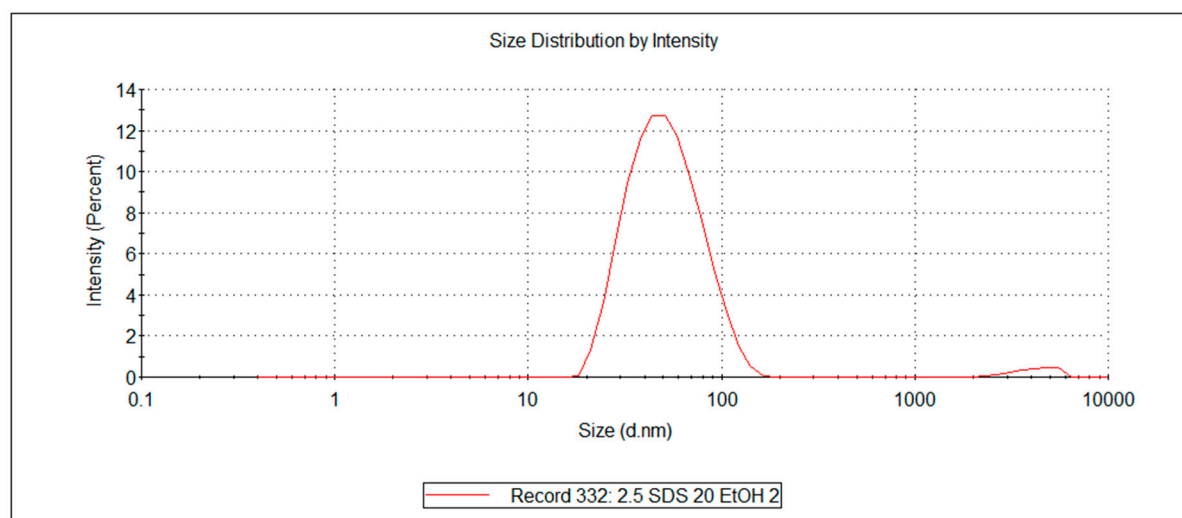


Figure S28. 2.5 g/L SDS, 20.0 V/V% EtOH

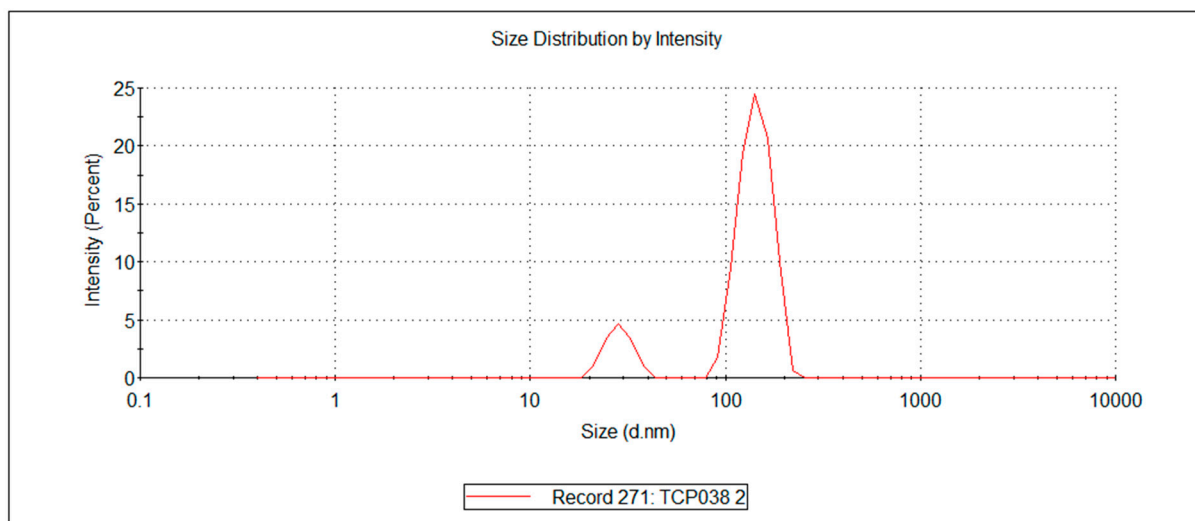


Figure S29. 5.0 g/L SDS, 20.0 V/V% EtOH

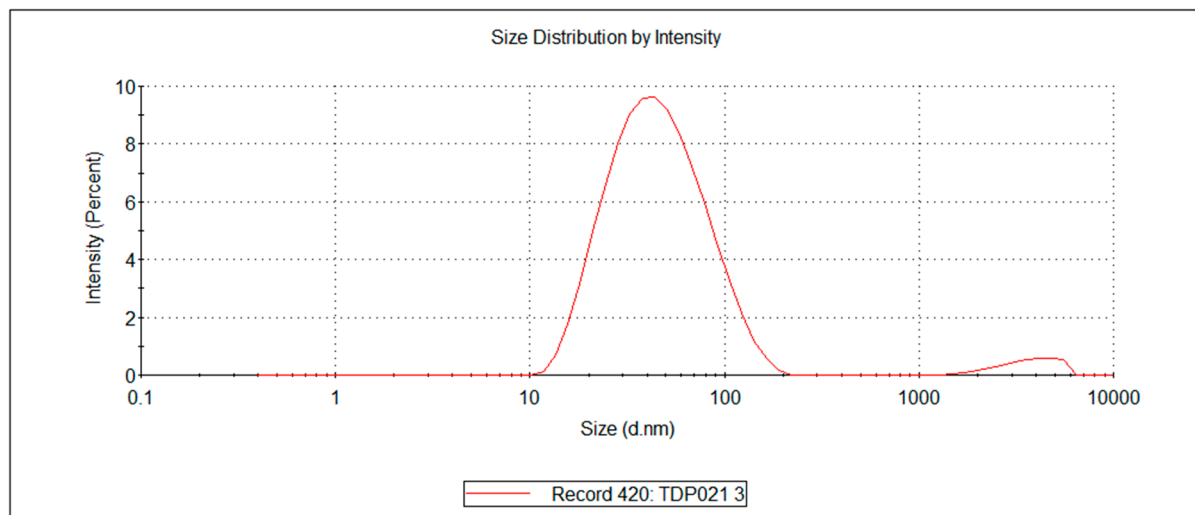


Figure S30. 0.5 g/L SDS, 5.0 V/V% *n*-propanol

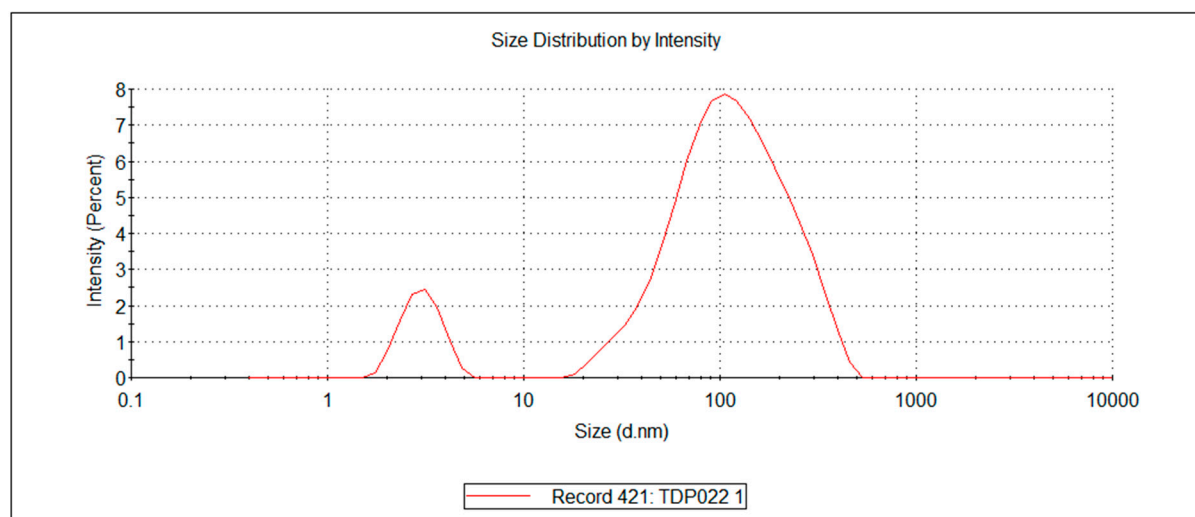


Figure S31. 1.0 g/L SDS, 5.0 V/V% *n*-propanol

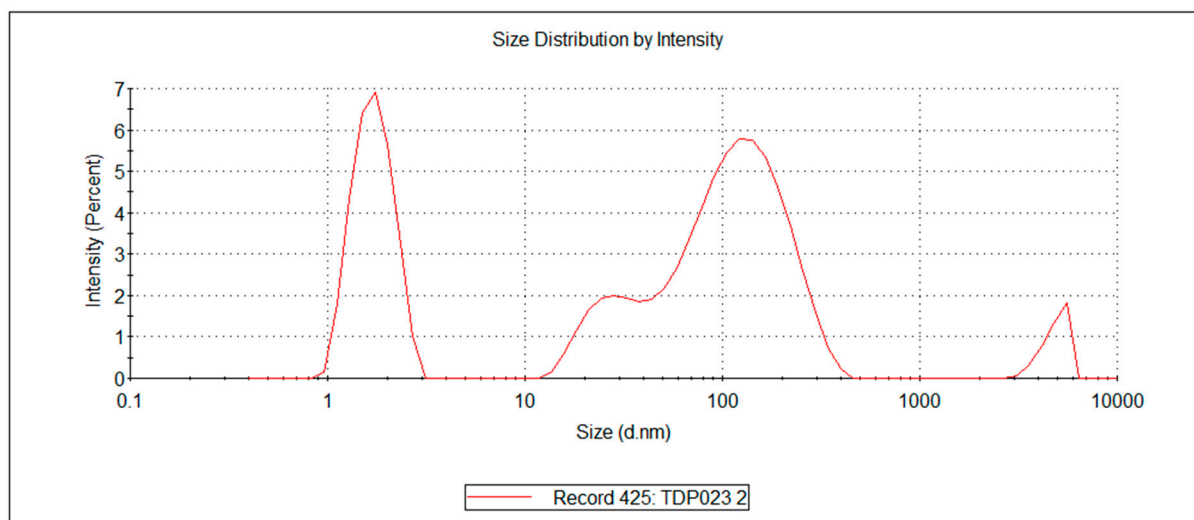


Figure S32. 2.5 g/L SDS, 5.0 V/V% *n*-propanol

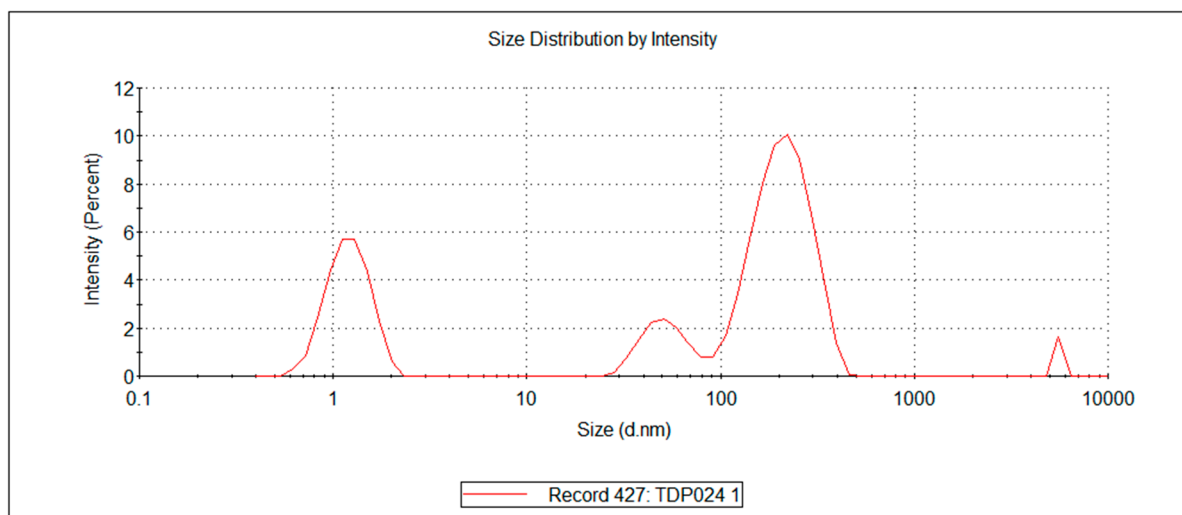


Figure S33. 5.0 g/L SDS, 5.0 V/V% *n*-propanol

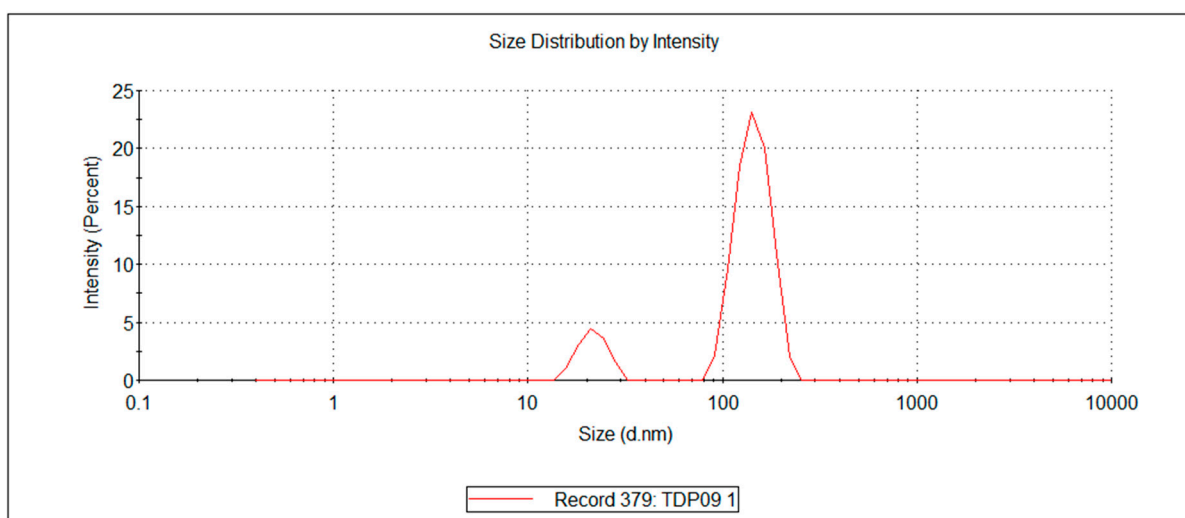


Figure S34. 0.5 g/L SDS, 10.0 V/V% *n*-propanol

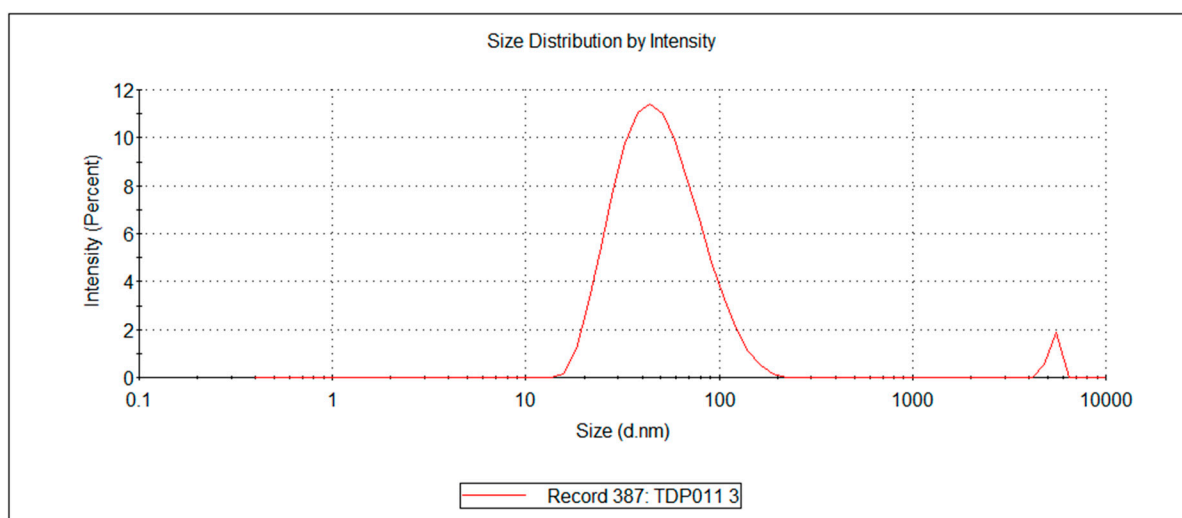


Figure S35. 1.0 g/L SDS, 10.0 V/V% *n*-propanol

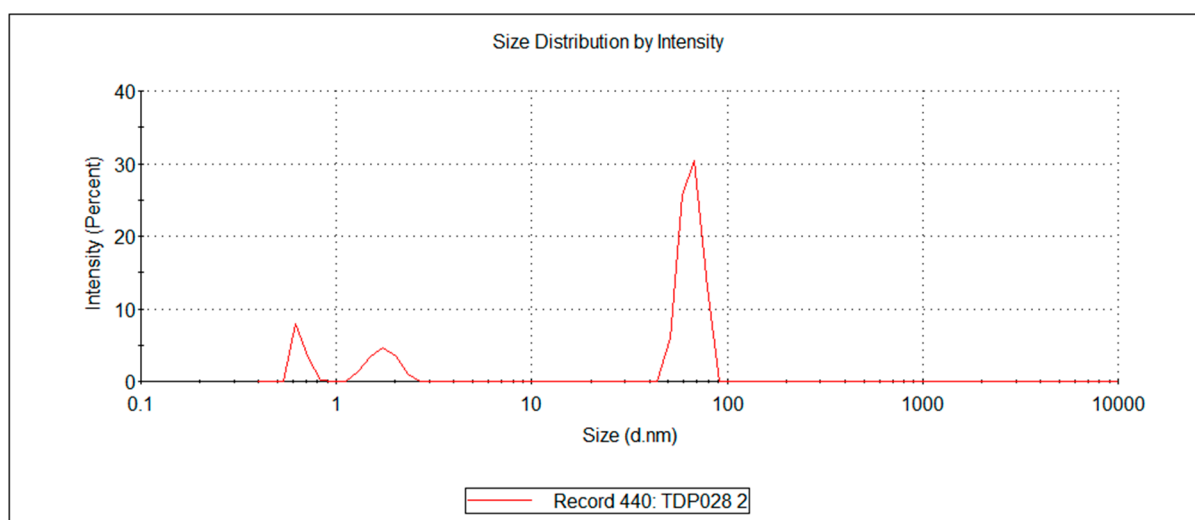


Figure S36. 2.5 g/L SDS, 10.0 V/V% *n*-propanol

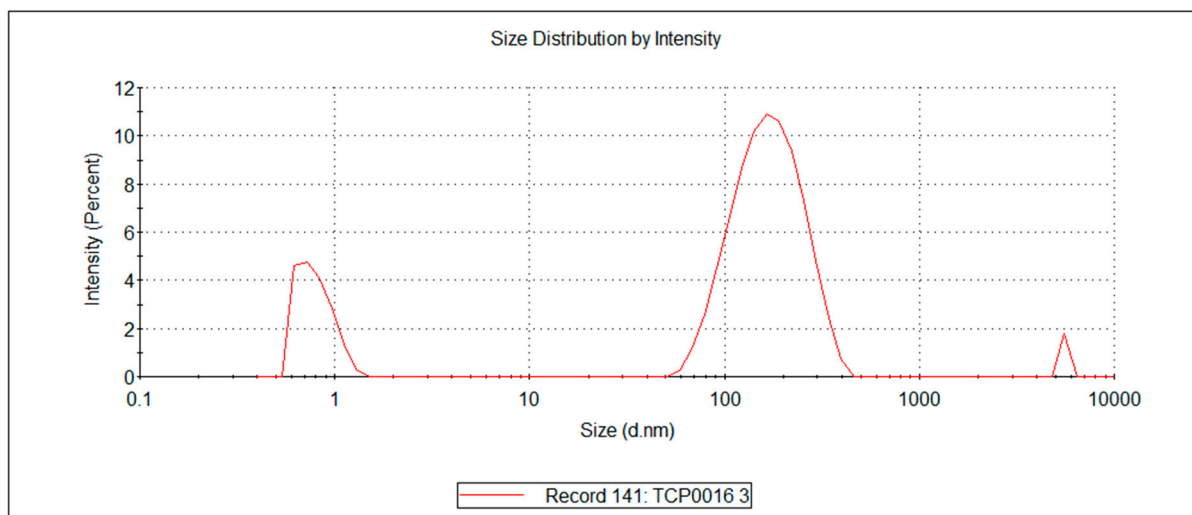


Figure S37. 5.0 g/L SDS, 10.0 V/V% *n*-propanol

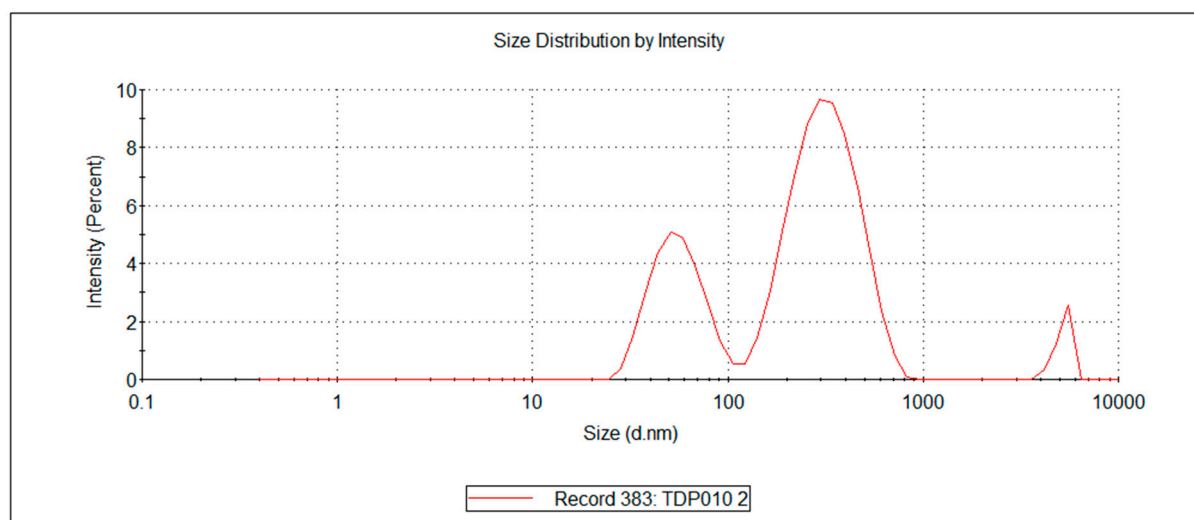


Figure S38. 0.5 g/L SDS, 20.0 V/V% *n*-propanol

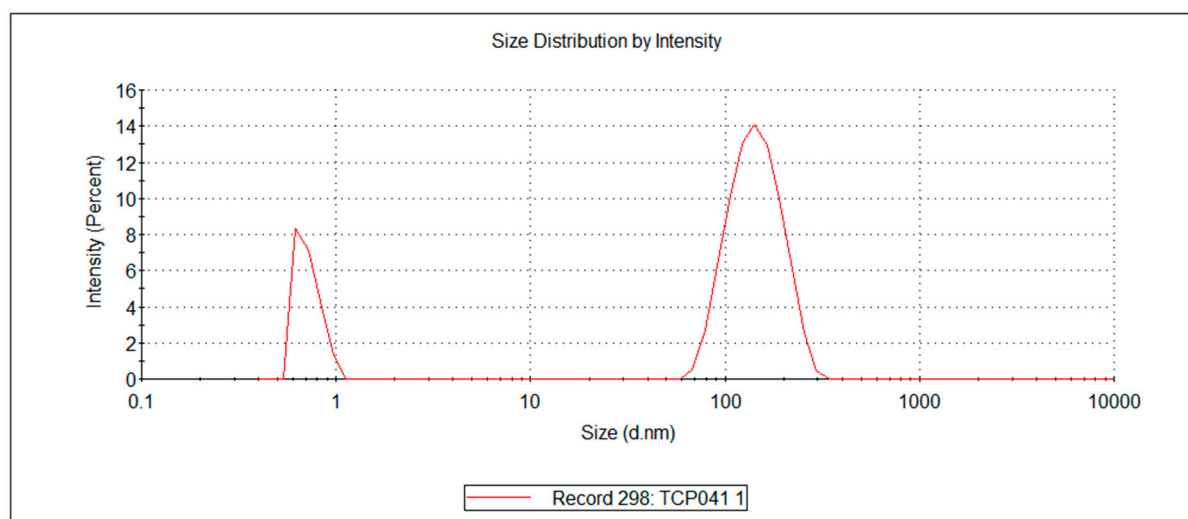


Figure S39. 1.0 g/L SDS, 20.0 V/V% *n*-propanol

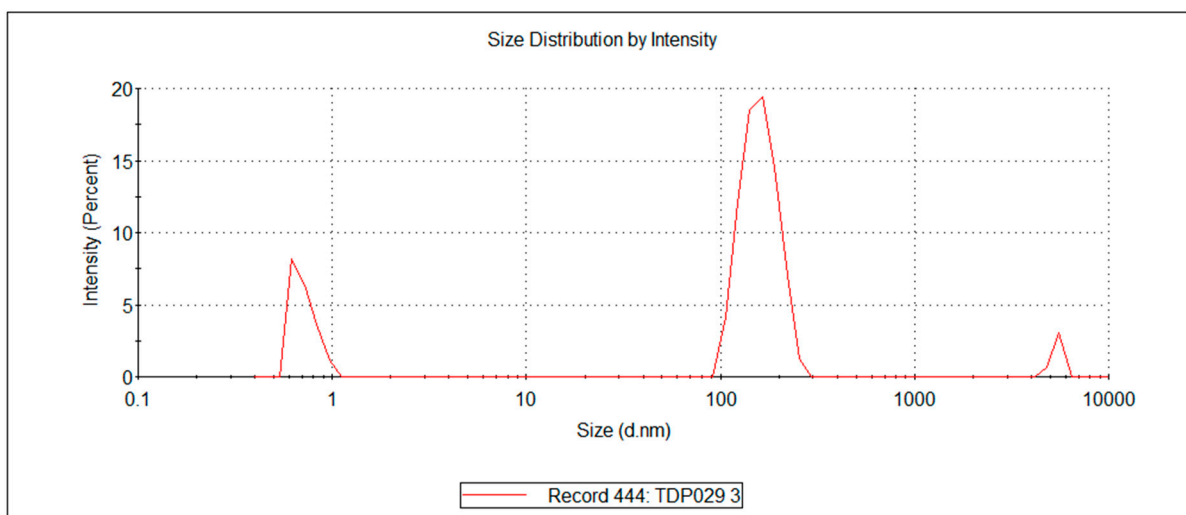


Figure S40. 2.5 g/L SDS, 20.0 V/V% *n*-propanol

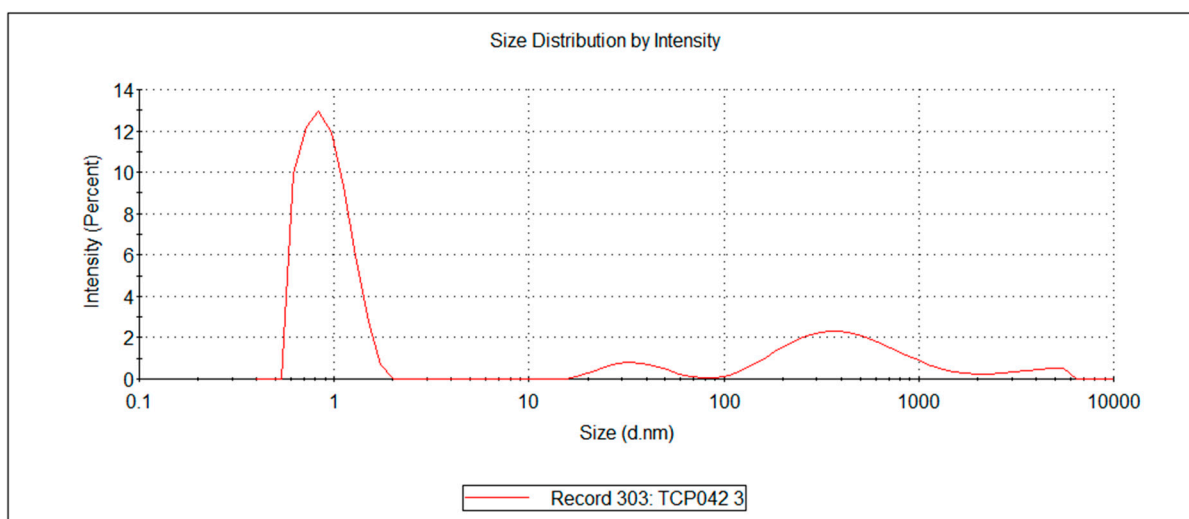


Figure S41. 5.0 g/L SDS, 20.0 V/V% *n*-propanol

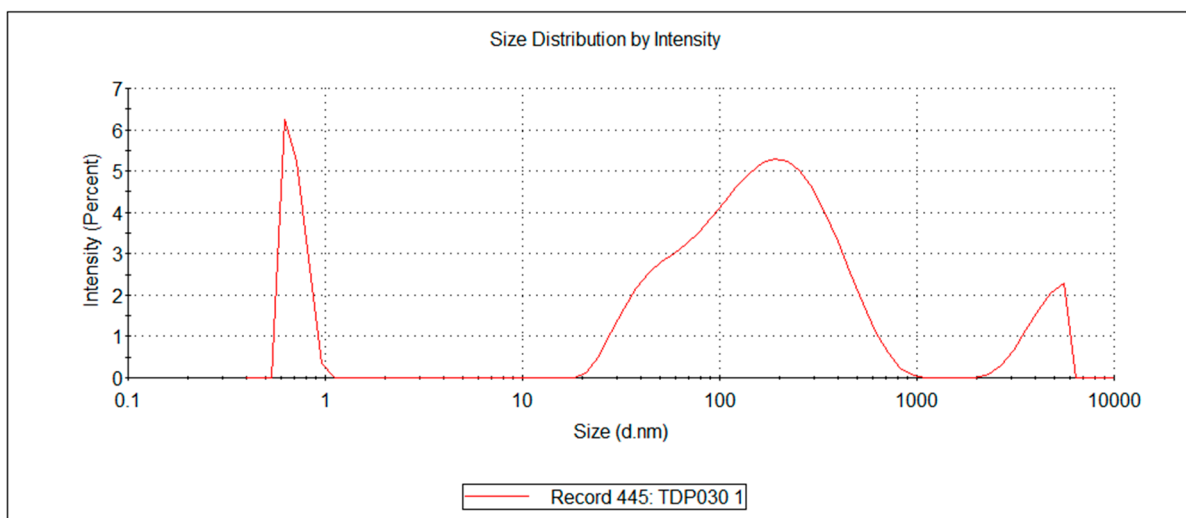


Figure S42. 0.1 g/L SDS, 5.0 V/V% *n*-butanol

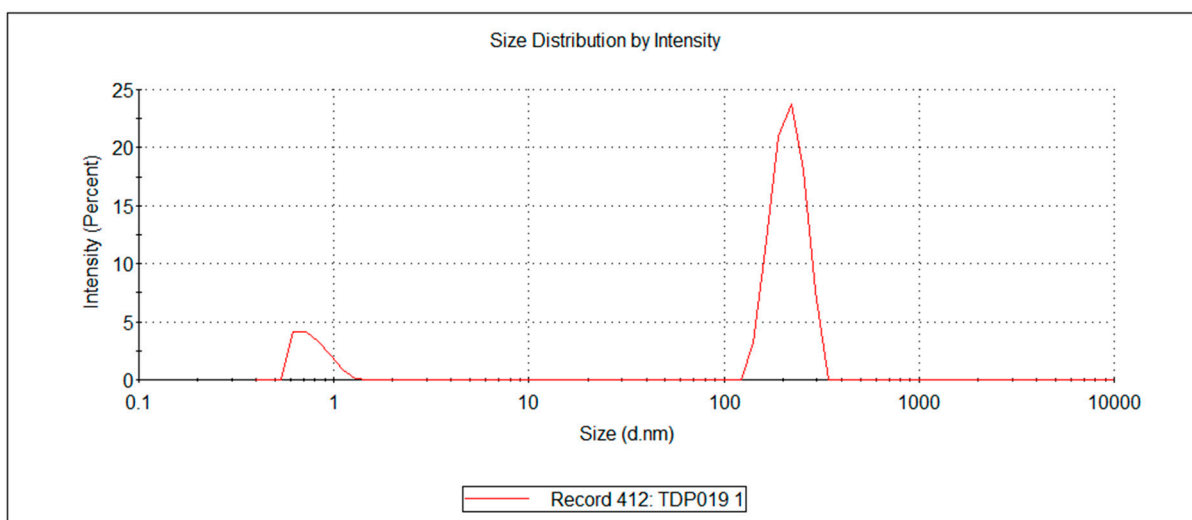


Figure S43. 0.5 g/L SDS, 5.0 V/V% *n*-butanol

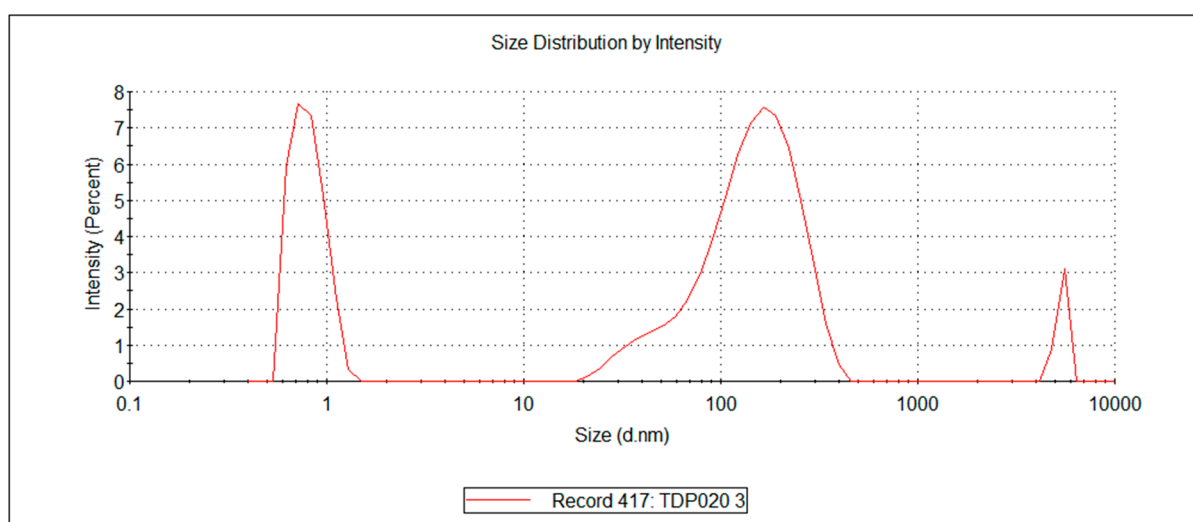


Figure S44. 1.0 g/L SDS, 5.0 V/V% *n*-butanol

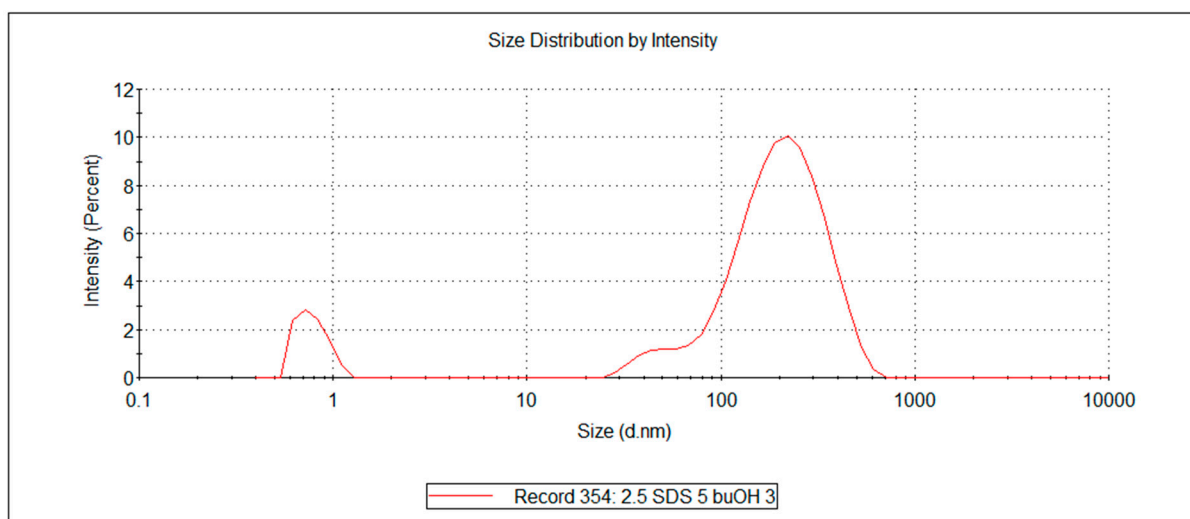


Figure S45. 2.5 g/L SDS, 5.0 V/V% *n*-butanol

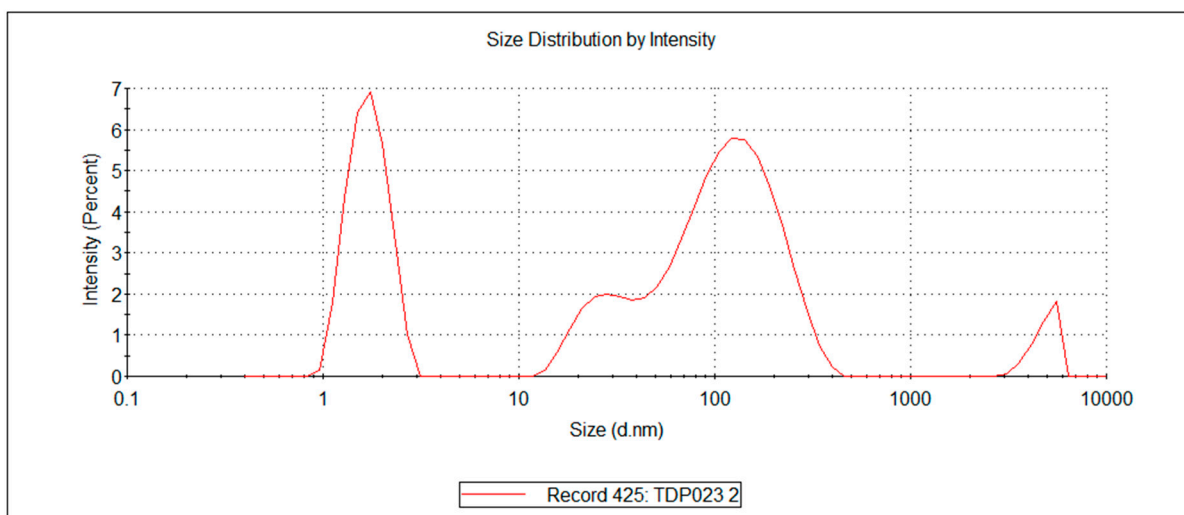


Figure S46. 5.0 g/L SDS, 5.0 V/V% *n*-butanol