

Correction to Lyotropic Liquid Crystallinity of Amylose Tris(alkylcarbamates): Cholesteric and Smectic Phase Formation in Different Solvents

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The distances a between two chains calculated from the diffraction peaks at 3.65, 4.5, and 3.4 nm⁻¹ for ATBC, ATEC, and ATHC in ethyl lactates should be the same as d-spacing, that is, 1.72, 1.40, and 1.85 nm, respectively. Therefore, values of the phase boundary concentration c_A between biphasic region and anisotropic phase on p 4593 are 1.15, 1.02, and 1.05 g cm⁻³ and the volume fractions ϕ are 0.96, 0.79, and 0.93 for ATBC, ATEC, and ATHC. These values are fairly close or slightly smaller than the ideal volume fraction $\pi/\sqrt{12} = 0.9069$ for hexagonal close packed cylinder structure. Regarding this, Figure 9 is illustrated below.

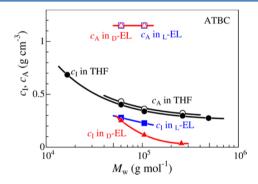


Figure 9. Phase diagram of ATBC in D-EL (triangles), L-EL (squares), and in THF (circles) at 25 °C. Unfilled and filled symbols denote $c_{\rm A}$ and $c_{\rm D}$ respectively.