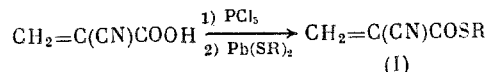


In contrast to α -cyanoacrylates [1], their sulfur analogs, $\text{CH}_2=\text{C}(\text{CN})\text{COSR}$ (I), have not yet been obtained in pure monomeric form despite numerous attempts [2]. In the present communication, we describe a synthesis for the first representatives of this class, $\text{R} = \text{C}_2\text{H}_5$ (Ia) and $\text{R} = t\text{-C}_4\text{H}_9$ (Ib), according to the scheme:



An equimolar amount of PCl_5 was added with stirring to a suspension of α -cyanoacrylic acid [3] in xylene. Then, POCl_3 was distilled off and lead salt of the thiol was added. The mixture was stirred and PbCl_2 was filtered off. Distillation of the solvent and vacuum distillation of the residue gave thiol esters (Ia) and (Ib) in 40-50% yield. Ester (Ia) is a mobile, colorless liquid, bp 65°C (1.5 mm), which readily polymerizes at room temperature even in the presence of radical and ionic polymerization inhibitors. PMR spectrum (δ , ppm): 0.85 t (3H, CH_3), 2.52 q (2H, CH_2), 5.23 s (1H), 6.08 s (1H) (olefinic protons). Ester (Ib) does not polymerize as readily as (Ia) and may be stored for a prolonged period at 0°C in the absence of inhibitors, bp 70°C (1 mm). PMR spectrum: 1.24 s (9H, $t\text{-Bu}$), 5.20 s (1H), and 6.08 s (1H) (olefinic protons). The elemental analysis data for these compounds were satisfactory.

LITERATURE CITED

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2. S. Harris, J. Polym. Sci., Polym. Chem. Ed., 19, No. 10, 2655 (1981).
3. West German Patent No. 3,415,181 (1985).