Excess Molar Enthalpies of the Ternary Mixture {1,2-Dichloropropane + 2-Pentanol + 3-Pentanol} at T=298.15 K and P=101.3 kPa

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Excess molar enthalpies H^E_m at T=298.15 K and atmospheric pressure for the ternary mixture {$x_1$1,2-dichloropropane (1,2-DCP) + $x_2$2-pentanol + $(1-x_1-x_2)$3-pentanol} and its constituent binary system {$x'_1$2-pentanol + $x'_2$3-pentanol} have been determined over the whole composition range. Values of excess molar enthalpies were measured using an isothermal micro-calorimeter with flow-mixing cell. In studying the ternary system, excess molar enthalpies $H^E_{m,123}[= H^E_{m,1+23} + (1-x)H^E_{m,23}]$ were obtained by measuring $H^E_{m,1+23}$ values for *pseudo-binary* mixtures resulting from adding 1,2-DCP to binary mixtures composed of {$x'_1$2-pentanol + $x'_2$3-pentanol} having a fixed molar ratio $x'_1/x'_2 \approx$ 0.33, 0.98 and 2.94. H^E_m values of the ternary and constituent binary mixtures are positive over the whole composition range. Experimental results of the constituent binary mixtures were fitted to the Redlich-Kister polynomial equation to obtain the binary coefficients. Curves of constant excess molar enthalpies on mixing were plotted in the triangle diagram. Comparison of the predictions by Radojkovič equation with experimental H^E_m values was made.