

Excess Molar Properties of the Binary Systems {1,2-dichloropropane + 2-propanol, or + 2-butanol} at T=298.15 K and 101.3 kPa

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Excess molar volumes  $V^E$  and excess molar enthalpies  $H^E$  at T=298.15K and atmospheric pressure the binary systems of 1,2-dichloropropane with 2-propanol and 2-butanol have been reported by measuring density and heat flux, respectively.

Two digital ISCO pumps (model 500D syringe pump, ISCO Inc., U.S.A.) were newly used to deliver liquid components at constant volumetric flow rates to the mixing cell of the calorimeter. The reliability of the calorimeter has been re-examined by means of enthalpies of mixing for the systems recommended as reference mixtures {cyclohexane + n-hexane} with the results of Tanaka et.al., Christensen et.al. and Ott et.al. for the system {cyclohexane + n-hexane} (endothermic) and Chand & Fenby and Costigan et.al. for the system {water + ethanol} (exothermic). In all cases, the results were in good agreement with those published data.

The experimental results of both  $V^E$  and  $H^E$  were fitted to Redlich-Kister equation to correlate the composition dependence. The experimental  $H^E$  data were also fitted to three local-composition models (Wilson, NRTL, and UNIQUAC).