The vapour pressure of water as a function of solute concentration above aqueous solutions of fructose, sucrose, raffinose, erythritol, xylitol, and sorbitol

The vapour pressure of water above an aqueous solution of sucrose at T = 298.06 K has been measured for 9 sucrose mole fractions up to 0.12. Vapour pressure measurements have also been made on aqueous solutions of meso-erythritol, xylitol, sorbitol, fructose, and raffinose at T = 317.99 K. The excess molar enthalpy has also been determined for the aqueous sucrose system at T = 318.15 K. The data obtained are compared to literature data for related systems and the effects of the solutes on solution structure are discussed.

General information
Publication status: Published
Organisations: Department of Chemistry, Roskilde University
Contributors: Cooke, S., Jonsdottir, S. O., Westh, P.
Pages: 1545-1555
Publication date: 2002
Peer-reviewed: Yes

Publication information
Journal: JOURNAL OF CHEMICAL THERMODYNAMICS
Volume: 34
Issue number: 10
ISSN (Print): 0021-9614
Ratings:
Scopus rating (2002): SJR 0.81 SNIP 1.185
Web of Science (2002): Indexed yes
Original language: English
Source: orbit
Source ID: 42937
Research output: Contribution to journal › Journal article – Annual report year: 2002 › Research › peer-review