J. Gmehling U. Onken

VAPOR-LIQUID EQUILIBRIUM DATA COLLECTION

Organic Hydroxy Compounds: C₅₊-Alcohols and Phenols (Supplement 10)

Chemistry Data Series

Vol I, Part 2I (in conjunction with Part 2m)

Published by DECHEMA Gesellschaft für Chemische Technik und Biotechnologie e. V.



Vapor-Liquid Equilibrium Data Collection

21

Organic Hydroxy Compounds: C₅₊-Alcohols and Phenols (Supplement 10)

Tables and diagrams of data for binary and multicomponent mixtures up to moderate pressures. Constants of correlation equations for computer use.

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Technische Chemie Universität Oldenburg

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Organic Hydroxy Compounds: C₅₊-Alcohols and Phenols (Supplement 10)

2-Methyl-3-butyn-2-ol Cyclopentanol 2-Methyl-3-buten-2-ol 3-Methyl-3-buten-1-ol 2,2-Dimethyl-1-propanol 2-Methyl-1-butanol 3-Methyl-1-butanol 3-Methyl-2-butanol

1-Pentanol

2-Pentanol 3-Pentanol

tert-Pentanol Phenol

1,2-Dihydroxybenzene <Pyrocatechol> 1,3-Dihydroxybenzene <Resorcinol> 2-Hexyn-1-ol Cyclohexanol

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AUTHOR'S PREFACE

This volume is another supplement of our Vapor-Liquid Equilibrium Data Collection. It contains VLE data of systems with C_{5+} -alcohols and the different phenols from the Dortmund Data Bank.

Besides consulting and the development of software tools for the synthesis and design of the various industrial processes the continuous update of the Dortmund Data Bank (DDB), is one of the main activities of DDBST GmbH (www.ddbst.com).

Today the Dortmund Data Bank (DDB) is the largest factual data bank for thermophysical properties. It contains all types of pure component properties and mixture data, such as phase equilibria, excess and transport properties for non-electrolyte, electrolyte and polymer systems. The Dortmund Data Bank (DDB) and the software package is used in-house by a large number of companies. A great part of the stored data is also available online via DETHERM ... on the Web.

The edition of this volume would not have been possible without the valuable efforts of the DDBST team. With gratitude we would also like to mention Dr. R. Sass from DECHEMA for his reliable cooperation in editing this volume.

Oldenburg and Dortmund, December 2010

J. Gmehling U. Onken

PREFACE OF THE EDITOR

DECHEMA e.V. Society for Chemical Engineering and Biotechnology was founded in 1926 with the aim of improving cooperation between chemists and engineers. One concrete implementation of this aim was the publication in the mid-1970s of collections of basic thermophysical data in electronic and book form in response to the increasing importance of mathematical modelling, computer simulation and optimization. On account of its sheer volume and limited circle of interest, this was not the sort of material that publishers rush to publish. DECHEMA leapt into the breach and has since sponsored and published the DECHEMA Chemistry Data Series for well over a quarter of a century. Much of the original work to determine the values obtained was financed by the German Federal Ministry of Research and Technology.

We hope that the publication of this collection of data in the DECHEMA Chemistry Data Series will encourage other authors to publish their own collections of thermophysical data and it goes without saying that we would be happy to pass on the experience we have accumulated over the years.

Finally, no new edition would be complete without a word of thanks to our readers – scientists and engineers from the thermophysical data community – for their constructive suggestions and input which have contributed to its success. We are confident that you will find this new edition of the DECHEMA Chemistry Data Series not only useful, but also interesting and inspiring.

Frankfurt am Main, December 2010

Richard Sass

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