

IUPAC Project Progress Report

Date: July 2007

Task Group Leader: Andrzej Maczynski

Project number: 2005-006-1-500

Project Title: Title: Mutual Solubility of Alcohols and Water (update of SDS Vol 15)

Report:

1. Current status of project:

The project is in progress and published in the five following Parts:

Part 1: C₄ Alcohols with Water

Part 2: C₅ Alcohols with Water

Part 3: C₆ Alcohols with Water

Part 4: C₇ Alcohols with Water

Part 5: C₈ - C₁₇ Alcohols with Water

Four articles (Parts 1 -4) have been published in the Journal of Physical and Chemical Reference Data, one (Part 5) is in print:

Maczynski A., Shaw D. G., (Editors), Góral M., Wisniewska-Gocłowska, IUPAC-NIST Solubility Data Series, Alcohols with Water–Revised and Updated, Part 1. C₄ Alcohols with Water. *J. Phys. Chem. Ref. Data* **36**, 59 (2007).

Maczynski A., Shaw D. G., (Editors), Góral M., Wisniewska-Gocłowska, IUPAC-NIST Solubility Data Series, Alcohols with Water–Revised and Updated, Part 2. C₅ Alcohols with Water. *J. Phys. Chem. Ref. Data* **36**, 133 (2007).

Maczynski A., Shaw D. G., (Editors), Góral M., Wisniewska-Gocłowska, IUPAC-NIST Solubility Data Series, Alcohols with Water–Revised and Updated, Part 3. C₆ Alcohols with Water. *J. Phys. Chem. Ref. Data* **36**, 190 (2007).

Maczynski A., Shaw D. G., (Editors), Góral M., Wisniewska-Gocłowska, IUPAC-NIST Solubility Data Series, Alcohols with Water–Revised and Updated, Part 4. C₇ Alcohols with Water. *J. Phys. Chem. Ref. Data* **36**, 399 (2007).

Maczynski A., Shaw D. G., (Editors), Góral M., Wisniewska-Gocłowska, IUPAC-NIST Solubility Data Series, Alcohols with Water–Revised and Updated, Part 5. C₈ - C₁₇ Alcohols with Water. *J. Phys. Chem. Ref. Data* **36**, xxx (2007). in print

2. Progress relative to 'milestones': OK

3. Difficulties encountered (or concerns):no

4. Projected completion date (documents ready for external review): the external review has been done

5. Please list all of the intended outputs and the dissemination plan for this project (viz. articles, CD, conference presentations; etc.). These may have been expanded since project approval:

(i) already accomplished;

M. Góral, B. Wisniewska-Gocłowska, and A. Maczynski, Recommended Liquid-Liquid Equilibria, Part 4, 1–Alcanol - Water Systems, *Journal of Physical and Chemical Reference Data* **35**, 391 (2006).

(ii) planned

M. Góral, P. Oracz, and A. Maczynski, Recommended Liquid-Liquid Equilibria, Part 6, Alcohol - Water Systems, *Journal of Physical and Chemical Reference Data*

6. If your project is within 6 months of completion, how do you plan to utilise any remaining budget for this project? no remaining budget

7. Work on this project may have identified new problems, issues, challenges, emerging topics, opportunities for related projects, etc. Please indicate these here so that the Division can follow up on them: New method of correlation, critical evaluation, prediction of solubility and liquid–liquid equilibrium data for binary alcohol+water systems