

# JOURNAL OF PHYSICAL AND CHEMICAL REFERENCE DATA

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Handbook of basic atomic spectroscopic data .....1559

*Jean E. Sansonetti and W. C. Martin*

A selection of the most important and frequently used atomic spectroscopic data is provided in an easily accessible compact format. The compilation includes data for the neutral and singly ionized atoms of all elements, hydrogen through einsteinium. Wavelengths, intensities, and spectrum assignments are given for each element.

IUPAC-NIST Solubility Data Series. 81. Hydrocarbons with Water and Seawater—Revised and Updated. Part 7.  $C_8H_{12}$ – $C_8H_{18}$  Hydrocarbons with Water .....2261

*David G. Shaw and Andrzej Maczynski*

The mutual solubility and related liquid-liquid equilibria of  $C_8H_{12}$ – $C_8H_{18}$  hydrocarbons with water are exhaustively and critically reviewed. Reports of experimental determinations of solubility in 20 chemically distinct binary systems that appeared in the primary literature prior to the end of 2002 are compiled. For five systems sufficient data are available to allow critical evaluation. A new method based on the evaluation of the all experimental data for a given homologous series of aliphatic and aromatic hydrocarbons was used.

IUPAC-NIST Solubility Data Series. 81. Hydrocarbons with Water and Seawater—Revised and Updated. Part 8.  $C_9$  Hydrocarbons with Water .....2299

*David G. Shaw and Andrzej Maczynski*

The mutual solubility and related liquid-liquid equilibria of  $C_9$  hydrocarbons with water are exhaustively and critically reviewed. Reports of the experimental determination of solubility in 18 chemically distinct binary systems that appeared in the primary literature prior to the end of 2002 are compiled. For eight systems, sufficient data are available to allow critical evaluation. A new method based on the evaluation of the all experimental data for a given homologous series of aliphatic and aromatic hydrocarbons was used.

Erratum: “IUPAC-NIST Solubility Data Series. 80. Gaseous fluorides of boron, nitrogen, sulfur, carbon, and silicon and solid xenon fluorides in all solvents” [J. Phys. Chem. Ref. Data 34, 201 (2005)] .....2347

*H. Lawrence Clever*

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