Gaseous Fluorides of Boron, Nitrogen, Sulfur, Carbon, and Silicon and Solid Xenon Fluorides in All Solvents

H. Lawrence Clever (editor)
IUPAC-NIST Solubility Data Series. 80.
Journal of Physical and Chemical Reference Data,
Vol. 34, No. 1, pp. 201–438, 2005

This volume provides a compilation of data from a literature search through 2002 June for solubility data on the gases BF_3, NF_3, N_2F_4, SF_6, CF_4, CHF_3, CH_2F_2, CH_3F, C_2F_6, CHF_5, 1,1,1,2-$C_2H_2F_4$, 1,1,1-$C_2H_3F_3$, 1,1-$C_2H_4F_2$, CH_5F, C_3F_8, c-C_4F_8, C_2F_4, 1,1-$C_2H_2F_2$, C_2H_3F, C_3F_6, C_3F_6O, and SiF_4, and the solids XeF_6, XeF_4, and XeF_2 in all solvents. Where feasible, evaluations have been carried out. The evaluations were mostly carried out for water as a solvent, as the water systems are the most extensively studied. For other systems there is often only one or two sets of measurements, which do not agree well. Evaluation of such systems will have to wait for further experimental measurements.

www.iupac.org/publications/sds/2005/80_abstract.html

Polymers in Novel Applications

H. Pasch and R.D. Sanderson (editors)
Macromolecular Symposia, Vol. 225
Wiley-VCH, 2005, pp. 1–237
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The UNESCO School and Conference on Macromolecules & Materials Science is held annually in different locations in South Africa. World authorities in various fields of macromolecular science are invited to give tutorials at the UNESCO School and informative plenaries at the conference. The exposure to new ideas and advanced concepts in macromolecular science is of great importance to South African students and senior staff of various universities and research institutions.

This volume contains abridged versions of a number of papers presented at the 7th UNESCO/IUPAC Conference (April 2004), which focused on polymers in medicine, nanotechnology, degradation, and stabilization. These papers—and papers from previous UNESCO conferences—are available at <http://academic.sun.ac.za/unesco/>.

www.iupac.org/publications/macro/2005/225_preface.html

Bio-Based Polymers: Recent Progess

S.S. Im, Y.H. Kim, J.S. Yoon, and I.-J. Chin (editors)
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Most people would agree that we live in an "age of plastics." Packaging is one of the areas where plastics are favorably used. In particular, as the geographical separation between the producers and the consumers has been widened, efficient packaging became essential to retain the nutrients and freshness of produce and to reduce the amount of preservatives used.

There is an ever-increasing demand for manufacturing plastics out of sustainable resources, because raw materials derived from fossil fuels are rather limited. Bio-based polymers can make excellent candidates for such materials. It was, therefore, very timely that the 8th World Conference on Biodegradable Polymers and Plastics (BDPP8) was held to discuss current issues and the most recent advances in biodegradable and bio-based polymers and plastics. The conference series began in 1991 as the International Scientific Consensus Workshop on Degradable Materials, and thereafter has been held almost every two years. The BDPP8 emphasized the industrial aspects of biodegradable plastics, and representatives of the major producers of biodegradable plastics were invited to present the most recent developments. Government policies and regulatory issues of several countries were also addressed. The list of participants shows a broad spectrum in terms of countries represented, areas of interest, and types of organizations.

This volume contains selected papers on six different topics: microbial poly(hydroxy alkanoate)s, poly(lactic acid)s, biodegradable polyesters and polyurethanes, hydrogels and biomedical applications, blends and processing, and microbial degradation.

www.iupac.org/publications/macro/2005/224_preface.html