



REFERENCES

Allen, L., and Matijevic, E. (1970), J. Coll. Inter. Sci., Vol. 33, P. 420.

ASTM D3677-90, Standard Test Method for Rubber-Identification by Infrared Spectrophotometry.

Bachmann, J. H., Sellers, J. W., Wagner, M. P., Wolf, R. F. (1959), Fine Particle Reinforcing Silicas and Silicates in Elastomer, Rubber Chem. and Technol., Vol. 32, No.5, pp. 1286-1391.

Barlow, F. W. (1993), Rubber Compounding, 2nd Edition, Marcel Dekker. Inc., New York.

Bitting, D. (1985), M.S. Thesis. The University of Oklahoma.

Chen, H. (1992), M.S. Thesis. The University of Oklahoma.

Duman, N. (1994), M.S. Thesis. The University of Oklahoma.

Evans, L. R. and Waddell, W. H. (1994), Correlation of Silica-Filled Compounds, Rubber Plastics News, April 25, 1994, pp. 15-18.

Harwell, J. H., Hoskins, J. C., Schechter, R. S., and Wade, W. H. (1985), Pseudophase Separation Model for Surfactant Adsorption: Isomerically Pure Surfactants, Langmuir, Vol.1, pp.251-262.

Hofman, W. (1989), Rubber Technology Handbook, Hanser Publishers, New York.

Lai, C. (1992), M.S. Thesis, The University of Oklahoma.

Levitz, P., Damme, H. V., and Keravis, D. (1984), Fluorescence Decay Study of the Adsorption of Nonionic Surfactants at the Solid-Liquid Interface. I. Structure of the Adsorption Layer on a Hydrophilic Solid, J. Phys.Chem., Vol. 88, pp. 2228-2235.

Long, H. (1985), Basic Compounding and Processing of Rubber, Rubber Division, The University of Akron.

Mangaokar, A. S. (1991), M.S. Thesis. The University of Oklahoma.

Mark, J.E., Erman, B. and Eirich, Frederick R. (1994), Science and Technology of Rubber, 2nd. Edition, Academic Press, San Diego.

Medalia, A. I. (1974), Filler Aggregates and Their Effect on Reinforcement, Rubber Chem. and Technol., Vol. 47, No.2, pp.411-433

Nunn, C. C., Schechter, R. S., and Wade, H. W. (1982), Visual Evidence Regarding the Nature of Hemimicelles through Surface Solubilization of Pinacyanol Chloride, J. Phys. Chem., Vol. 86, pp. 3271-3272.

O' Haver, J. H., Harwell, J. H., O' Rear, E. A., Waddell W. H., Snodgrass, L. J. and Parkner, J. R. (1993), Formation of Ultra-thin Polystyrene Films in Adsorbed Surfactant Bilayers on Silica, Mat. Res. Soc. Symp. Proc., Vol. 304, pp. 161.

O' Haver, J. H., Harwell, J. H., O' Rear, E. A., Snodgrass, L. J. and Waddell, W. H. (1994), In-Situ Formation of Polystyrene in Adsorbed Surfactant Bilayers on Silica, Langmuir, Vol. 10, pp. 2588-2593.

O' Haver, J. H.(1995), Ph. D. Dissertation, The University of Oklahoma.

Polmanteer, K. P., Lentz, C. W. (1975), Reinforcement Studies-Effect of Silica Structure on Properties and Crosslink Density, Rubber Chem. and Technol., Vol. 48, No.5, pp. 795-809.

Rosen, M. J. (1989), Surfactants and Interfacial Phenomena, 2 nd. Edition, John Wiley & Sons, New York.

Valsaraj, K. T., (1989), Partitioning of Hydrophobic Nonpolar Volatile Organics between the Aqueous and Surfactant Aggregate Phases on Alumina, Sep. Sci. Technol., Vol.24, No.14, pp. 1191-1205.

Valsaraj, K. T., (1992), Adsorption of Trace Hydrophobic Compounds from Water on Surfactant-Coated Alumina, Sep. Sci. Technol., Vol.27, No.12, pp. 1633-1642.

Voet, A., Morawski, J. C., Donnet, J. B., (1977) Reinforcement of Elastomers by Silica, Rubber Chem. and Technol., Vol. 50, No. 2, pp 342-355.

Waddell, W. H., O' Haver, J. H., Harwell, J. H., L. J. and Evans, L. R. (1995), Organic-polymer Modified Precipitated Silica, accepted for publication, Journal of Applied Polymer Science.

Wagner, M. P. (1976), Reinforcing Silicas and Silicates, Rubber Chem. and Technol., Vol. 49, No. 3, pp 703-774.

Wang, M.-J. and Wolff, S. (1991a), Filler-Elastomer Interactions. Part I: Silica Surface Energies and Interactions with Model Compounds, Rubber Chem. and Technol., Vol. 64, No. 4, pp 559-576.

Wang, M.-J. and Wolff, S. (1991b), Filler-Elastomer Interactions. Part II: Carbon-Black-Surface Energies and Interactions with Elastomer Analogs, Rubber Chem. and Technol., Vol. 64, No. 4, pp 714-736.

Wang, M.-J. and Wolff, S. (1992), Filler-Elastomer Interactions. Part IV: The Effect of the Surface Energies of Fillers on Elastomer Reinforcement, Rubber Chem. and Technol., Vol. 65, No. 2, pp 329-342.

Wu, J., Harwell, J. H., O' Rear, E. A. (1987a), Two-Dimensional Reaction Solvents: Surfactant Bilayers in the Formation of Ultra-thin Films, Langmuir, Vol.3, pp. 531-537.

Wu, J., Harwell, J. H., O' Rear, E. A. (1987b), Two-Dimensional Reaction Solvents: Kinetics of Styrene Polymerization in Admicelles at or near Saturation, J. Phys Chem., Vol.91, pp. 623-634.

Wu, J. (1987c), Ph. D. Dissertation, The University of Oklahoma.

Yeskie, M. (1987), Ph. D. Dissertation, The University of Oklahoma.

Zaborski, M., Vidal, A., Ligner, G., Balard, H., Papirer, E., and Burnea, A., (1989), Comparative Study of the Surface Hydroxyl Groups of Fumed and Precipitated Silicas. 1. Grafting and Chemical Characterization, Langmuir, Vol. 5, pp. 447-451.

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