

REFERENCES

- [1] Weiss, K. D. *Prog Polym Sci* 1997, 22, 203.
- [2] Warner, K.; Mounts, T. L. *J Am Oil Chem Soc* 1993, 70, 983.
- [3] Liu, H. R.; White, P. J. *J Am Oil Chem Soc* 1992, 69, 528.
- [4] O'Keefe, S. F.; Wiley, V. A.; Knauft, D. A. *J Am Oil Chem Soc* 1993, 70, 489.
- [5] Barbour, M.; Clarke, J.; Fone, D.; Hoggan, A. Waterborne & solvent based acrylics and their end user applications. *Surface Coatings Technology* Vol. 1; Oldring, P., Lam, P., Eds. Wiley/SITA Technology: London, 1996.
- [6] Chen, D. S.; Jones, F. N. *J Coat Technol* 1988, 60, 39.
- [7] Kangas, L. S.; Jones, F. N. *J Coat Technol* 1987, 59, 89.
- [8] Kangas, L. S.; Jones, F. N. *J Coat Technol* 1987, 59, 99.
- [9] Manczyk, K.; Szewczyk, P. Highly branched high solids alkyd resins. *Prog Org Coat* 2002, 44, 99.
- [10] Kass, P.; Wicks, Z. W.; Jr. U.S. Patent 2,577,770 (1951).
- [11] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. *Organic Coatings Science and Technology*; John Wiley and Sons: New York, 1994; Vol. 1, 151.
- [12] Karakaya, C.; Gündüz, G.; Aras, L.; Mecidoğlu, I.A. *Prog Org Coat* 2007, 59, 265.
- [13] Zable, K. H.; Klaasena , R. P.; Muizebelt, W. J.; Gracey, B. P.; Hallett, C.; Brooks, C. D. *Prog Org Coat* 1999, 35, 255.
- [14] Levine, E. in *Proc. Water-Borne High-Solids Coat. Symp.*, New Orleans, 1977, pp. 155.
- [15] Larson, D. B.; Emmons, W. D. *J Coat Technol* 1983, 55, 49.
- [16] Raming, A.; Einhorn, S.; Finegan, P.; Merrill, C.; Staub, T.; Iceman, L. *Modern Paint and Coatings* 1996, January, 23-27.
- [17] Nicholson, J. *Waterborne Coatings and Additives*, Ed.; D. Karsa and W. Davies. The Royal Society of Chemistry, Cambridge, U.K., 1995, 73.
- [18] Triplett, T. *Industrial Paint and Powder* 1995, 10, 28.
- [19] Jotischky, H. *Eur. Coatings J.* 1995, 10, 696.

- [20] Schoff, C. ASTM Standardization News, 1995 (October), 24-27.
- [21] Reisch, M. Chem Eng News, 1995 (September), 30-52.
- [22] Padgett, J. J Coat Technol 1994, 66, 89.
- [23] Weissenborn, P. K.; Motiejauskaite, A. Prog Org Coat 2000, 40, 253.
- [24] Nabuurs, T.; Baijards, R. A.; German, A. L. Prog Org Coat 1996, 27, 163.
- [25] Gooch, J. W.; Wang, S. T.; Schork, F. J.; Poehlein, G. W. in Proc. Water-Borne, High Solids, Powder Coat. Symp., New Orleans, 1997, 366.
- [26] Bouboulis, C. J. in Proc. Water-Borne Higher-Solids Coat. Symp., New Orleans, 1982, 18.
- [27] Hurley, R.; Buona, F. J Coat Technol 1982, 54, 55.
- [28] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. Organic Coatings; John Wiley and Sons: New York, 1994, Vol. 2, 209.
- [29] Misev, T. A. Powder Coatings: Chemistry and Technology; John Wiley and Sons: New York, 1991.
- [30] Lehr, W. D. Powder Coating Systems; McGraw-Hill, Inc: New York, 1991.
- [31] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. Organic Coatings; John Wiley & Sons: New York, 1994, Vol. 2, Chap. 31.
- [32] Paul, S. Surface Coatings: Science and Technology; John Wiley & Sons: New York, 1986, 69.
- [33] Korschwitz; Jacqueline, I. Encyclopedia of polymer science and technology; Wiley-Interscience A John Wiley & Sons: 2003, Vol. 1.
- [34] Seniha Güner, F.; Yağci, Y.; Tuncer Erciyers, A. Prog Polym Sci 2006, 31, 633.
- [35] Hlaing, N. N.; Oo, M. M. Proceeding of world academy of science, Engineering and technology 2008, 36, ISSN 2070-3740.
- [36] Dutta, N.; Karak, N.; Dolui, S. K. Prog Org Coat 2004, 49, 146.
- [37] Ahmad, S.; Ashraf, S. M.; Sharmin, E.; Zafar, F.; Hasnat, A. Prog Cryst Growth Charact Mater 2002, 45, 83.
- [38] Guo, A.; Demydov, D.; Zhang, W.; Petrovic, Z. S. J Polym Environ 2002, 10, 49.
- [39] Guo, A.; Demydov, D.; Zhang, W.; Petrovic, Z. S. J Mater Sci 2006, 41, 4914.

- [40] Shabeer, A. Dissertation of Doctor Philosophy in Mechanical Engineering, University of Missouri- Rolla, 2006.
- [41] Lyon, C. K.; Becker, R. J Am Oil Chem Soc 1987, 64, 283.
- [42] Knaub, P.; Camberlin, Y. Eur Polym J 1986, 22, 633.
- [43] Hamid, Y.; Mohammad, R. M. Eur Polym J 2004, 40, 1233.
- [44] Qipeng, G.; Shixia, F.; Qingyu, Z. Eur Polym J 1990, 26, 1177.
- [45] Robertson, J. A.; Lyon, B. G.; Morrison, W. H.; Miller, J. F. J Am Oil Chem Soc 1988, 65, 985.
- [46] Bhunia, H. P.; Nando, G. B.; Chaki, T. K.; Basak, A.; Lenka, S.; Nayak, P. L. Eur Polym J 1999, 38, 1381.
- [47] Shende, P. G.; Dabhade, S. B. in: D.K. Vohra, D. Singh, P. Singh (Eds.), Proceedings of the National Seminar on Polymers, Allied Publishers Ltd., 1997, 104.
- [48] Jowkar-Deriss, M.; Karlsson, O. J Colloids Surf A 2004, 245, 115.
- [49] Reck, R. A. J Am Oil Chem Soc 1985, 62, 355.
- [50] Haupt, D. E.; Drinkard, G.; Pierce, H. F. J Am Oil Chem Soc 1984, 61, 276.
- [51] Hassan, H.; Yeong, S. K.; Ahmad, S. Proceedings of the 1993 PORIM International Palm Conference (chemistry and Technology), 1993, 227.
- [52] Taylor, C. J. A.; Marks, S. Eds. Convertible Coatings, Part 3; Chapman & Hall: London, 1972, Chap. 5.
- [53] Deligny, P.; Tuck, N. Resins for surface coatings, P.K.T. Oldering Ed.; John Wiley & Sons: Vol. 2, Alkyds & polyesters, London, 2001.
- [54] Turpin E. T. J Paint Technol 1975, 47, 40.
- [55] Kroschwitz, Jacqueline I.; Hoboken, N.J. Encyclopedia of Science and Technology; Wiley-interscience, John Wiley & Sons: New York, 2003, Vol. 1, 325.
- [56] Brown, R.; Ashjian, H.; Levine, W. Off. Digest 1961, 33, 539.
- [57] Kroschwitz, J. I.; Hoboken, N. J. Encyclopedia of polymer science and technology; Wiley-interscience, John Wiley & Sons: New York, 2003, Vol. 1. 319.
- [58] Patton, T. C. Alkyd Resin Technology; Interscience Publisher: New York, 1962, Chap. 8, 175.

- [59] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. *Organic Coatings*; John Wiley & Sons: New York, 1994, Vol. 1, Chap. 9.
- [60] Paul, S. *Surface coatings; Science & Technology*, John Wiley & Sons: New York, 1985, 105.
- [61] Kraft, W. H. *Am paint J* 1957, 28, 41, 3723.
- [62] Kaska, J.; Lešek, F. *Prog Org Coat* 1991, 19, 283.
- [63] Korschwitz; Jacqueline I.; Hoboken, N. J. *Encyclopedia of polymer science and technology*; Wiley- Interscience, John Wiley & Sons: New York, 2003, Vol. 1, 333.
- [64] Kiparissides, C. *Chem Eng Sci* 1996, 51, 1637.
- [65] Campbell, I. M. *Introduction to Synthetic Polymers*; Second Edition, Oxford University Press: New York, 2000, 221.
- [66] Odian, G. *Principle of Polymerization*, forth Edition, Wiley Interscience, A John Wiley & Sons: New York, 2004, 205.
- [67] Carothers, W. H. *J Am Chem Soc* 1929, 51, 2548.
- [68] Flory, P. J. *Chem Rev* 1946, 39, 137.
- [69] Kroschwitz; J. I. *Encyclopedia of polymer science and technology*; Wiley- Interscience, John Wiley & Sons publication: New York, 2003, Vol. 3, 249.
- [70] Martens, C. R. *Alkyd Resins*; Reinhold Publishing Corp: New York, 1961, 156.
- [71] Karandikar, V. C. *Paintindia* 2006, 56, 55-74.
- [72] Gooch, J. W. *Emulsification and Polymerization of Alkyd Resins*; Kluwer Academic: New York, 2002.
- [73] Wang, C.; Lin, G.; Pae, J.; Jones, F. N.; Ye, H.; Shen, W. *J Coatings Technol* 2000, 904, 55.
- [74] Wu, X. Q.; Schork, F. J.; Gooch, J. W. *J Polym Sci Part A*, 1999, 22, 4159.
- [75] Hudda, L.; Tsavalas, J. G.; Schork, F. J. *Polymer* 2005, 4, 993.
- [76] Tsavalas, J. G.; Luo, Y.; Schork, F. J. *J Appl Polym Sci* 2003, 87, 1825.
- [77] Tsavalas, J. G.; Gooch, J. W.; Schork, F. J. *J Appl Polym Sci* 2000, 7, 916.
- [78] Armitage, F.; Kut, S. *J Oil & Colour Chemists' Assoc* 1952, 35, 195.
- [79] Solomon, D. H. *J Oil & Colour Chemists' Assoc* 1962, 45, 88.

- [80] Fletcher, J. R.; Kelly, J. P.; Solomon, D. H. *J Oil & Colour Chemists' Assoc* 1963, 46, 127.
- [81] Hopwood, J. J.; Pallaghy, C.; Solomon, D. H. *J Oil & Colour Chemists' Assoc* 1964, 47, 289.
- [82] Solomon, D. H.; Wigney, P. J. *J Oil & Colour Chemists' Assoc* 1965, 48, 440.
- [83] Akintayo, C. O.; Adebawale, K. O. *Prog Org Coat* 2004, 50, 207.
- [84] Saravari, O.; Phapant, P.; Pimpan, V. *J Appl Polym Sci* 2005, 96, 1170.
- [85] Subhasri, M.; Dhirendra, K.; Nirvan, Y. P. S. *J Coat Technol Res* 1998, 70, 27.
- [86] Hewitt, D. H.; Armitage, F. *J Oil & Colour Chemists' Assoc* 1946, 29, 109.
- [87] Redknap, R. F. *J Oil & Colour Chemists' Assoc* 1960, 43, 260.
- [88] Kovacs, L.; Charlesworth, D. *J Oil & colour Chemists' Assoc* 1963, 46, 47.
- [89] Akbas, T.; Beker, U.G.; Güner, F. S.; Erciyes, A. T.; Yagci, Y. *J Appl Polym Sci* 2003, 88, 2373.
- [90] Güner, F. S.; Usta, S.; Erciyes, A.T.; Yagci, Y. *J Coat Technol* 2000, 72, 107.
- [91] Port, W. S.; Hansen, J. E.; Jordan, E. F.; Dietz, T. J.; Swern, D. *J Polym Sci* 1951, 7, 207.
- [92] Port, W. S.; Jordan, E. F.; Hansen, J. E.; Swern, D. *J Polym Sci* 1952, 9, 493.
- [93] Wilson, J. W.; Pfau, E. S. *Ind Eng Chem* 1948, 40, 530.
- [94] Wang, S. T.; Schork, F. J.; Poehlein, G. W.; Gooch, J. W. *J Appl Polym Sci* 1996, 60, 2069.
- [95] Uschanov, P.; Heiskanen, N.; Mononen, P.; Maunu, S. L.; Koskimies, S. *Prog Org Coat* 2008, 63, 92.
- [96] Padgett, J. C. *Proc. 19th Int. Conf. Organic Coatings Science and Technology*, Athens, Greece, July 1993, 387-416.
- [97] Heiskanen, N.; Jämsä, S.; Paajanen, L.; Koskimies, S. *Prog Org Coat* 2010, 67, 329.
- [98] Shim, J.; Park, D.; Kim, H. *Proceedings of the International Waterborne, High-Solids, and Powder Coatings Symposium* 1997, 159.
- [99] Patton, T. C. *Alkyd Resin Technology*; Interscience Publisher: New York, 1962 Chap. 6, 93.

- [100] Menczel, J. D.; Prime, R.B. Thermal analysis of polymer, fundamentals and applications; John Wiley & Sons: USA, 2009.
- [101] Wendlandt, W.W. M. Thermal Analysis; 3rd ed., Wiley: New York, 1986.
- [102] Crompton, T.R. Polymer reference book; Rapra Technology Limited: UK, 2006.
- [103] Menard, K. P. Dynamic Mechanical Analysis: A Practical Introduction; 2nd ed. CRC Press: Boca Raton, New York, 2008.
- [104] Packham, D. E. Int J Adhes Adhes 2009, 29, 248.
- [105] Anne, B.; Alessandro, G.; Jean, F. L. N. Ind Crop Prod 2001, 14, 155.
- [106] Kanai, T.; Mahato, T. K.; Kumar, D. Prog Org Coat 2007, 58, 259.
- [107] Gan, S. N.; Kim T. T. Pigment & Resin Technology 1999, 28, 283.
- [108] Hattori, T.; Terakawa, K.; Ichikawa, N.; Sakaki T.; Choong, D. H.; Gan, S. N.; Lee, S.Y. Rubber Composition, Rubber Composition For Tire, and Pneumatic Tire Using The Same, US Patent, US 2007/0100061A1, Joint Patent of UM& SRI&; 3-5- 2007.
- [109] Hattori, T.; Terakawa, K.; Ichikawa, N.; Sakaki, T.; Choong, D. H.; Gan, S. N.; Lee, S.Y. Rubber Composition, Rubber Composition For Tire, and Pneumatic Tire Using The Same, Malaysia Patent Application, PI 20070671, Joint patent of UM & SRI, 30-4-2007.
- [110] Goldsmith, A. Ind Eng Chem 1948, 40, 1205.
- [111] Satheesh, K. M. N.; Zahira, Y.; Siti, M.; Siddaramaiah, Abdullah, S. R. S. J Polym Enviro 2010, 18, 539.
- [112] Aigbodion, A. I.; Okieimen, F. E. Ind Crops Prod 2001, 13, 29.
- [113] Flory, P. J. Chem Rev 1946, 39, 154.
- [114] Aigbodion, A. I.; Okieimen, F. E. Eur Polym J 1996, 32, 1105.
- [115] Carothers, W. H. Trans Farady Soc 1936, 32, 39.
- [116] Chrissafis, K.; Paraskevopoulos, K. M.; Bikaris, D. N. Thermochim Acta 2006, 440, 166.
- [117] Kissinger, H. E. Anal Chem 1957, 29, 1702.
- [118] Ferdous, D.; Dalai, A. K.; Bej, S. K.; Thring, R.W. Energy Fuels 2002, 16, 1405.
- [119] Bicerano, J. Prediction of Polymer properties; Marcel Dekker, Inc: 3rd ed., New York, 2002, Chap. 16.

- [120] Lazzari, M.; Kitayama, T.; He, S.; Hatada, K.; Chiantore, O. Polym Bull 1997, 39, 85.
- [121] Ozawa, T. Bull Chem Soc Jpn 1965, 38, 188.
- [122] Flynn, J.; Wall, L.A. Polym Lett 1966, 4, 232.
- [123] Ozawa, T. J Thermal Anal 1970, 2, 301.
- [124] Vyazovkin, S. J Comput Chem 2001, 22, 178.
- [125] Tsavalas, J. G.; Luo, Y.; Schork, F. J. J Appl Polym Sci 2003, 87, 1825.
- [126] Seymour, R. B.; Carraher, C.E. Structure-Property relation in Polymers; Plenum Press: New York, 1984, Chap. 2.
- [127] Gordon, M.; Taylor, J. S. J Appl Chem 1952, 2, 493.
- [128] Gulmine, J. V.; Akcelrud, L. Eur Polm J 2006, 42, 553.
- [129] Schork, F. J.; Tsavalas, J. Prog Colloid Polym Sci 2003, 124, 126.
- [130] Gonzalez, I.; Asua, J.M.; Leiza, J. R. Polymer 2007, 48, 2542.
- [131] Van Krevelen, D. W. Properties of Polymers; Elsevier: 3rd ed., Amsterdam, 1990.
- [132] Hergenrother, P. M. article titled "Heat-Resistant Polymers", in Encyclopedia of Polymer Science and Engineering, 7, Wiley-Interscience: New York, 1987.
- [133] Micheal, S. Szycher's Handbook of Polyurethanes; CRC Press LLC: Massachusetts, USA, 1999, Chap. 3, 17.
- [134] Chang, R. Chemistry; Mc Graw-Hill, Inc: 6th ed., New York, 1998.
- [135] Lazzari, M.; Kitayama, T.; He, S.; Hatada, K. Polym Bull 1997, 39, 85.
- [136] Konaganti, V. K.; Madras, G. Ind Eng Chem Res 2009, 48, 1712.
- [137] Tasic, S.; Bozic, B.; Dunjic, B. Prog Org Coat 2004, 51, 321.
- [138] Taylor, C. J. A.; Marks, S. Testing of Paints; Chapman & Hall: London, 1965, part 5. 25.
- [139] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. Organic Coatings; John Wiley and Sons: New York, 1994, Vol. 2, 153.
- [140] Taylor, C. J. A.; Marks, S. Convertible Coatings; Chapman & Hall: London, 1966, part 3, 164.

- [141] Taylor, C. J. A.; Marks, S. Testing of paints; Chapman & Hall: London, 1965, part 5, 101.
- [142] Somani, K. P.; Kansara, S. S.; Patel, N. K.; Rakshit, A. K. Int J Adhes Adhes 2003, 23, 269.
- [143] Patton, T. C. Alkyd resin; Interscience publishers: New York, 1962, Chap. 1, 18.
- [144] Solomon, D. H. The chemistry of Organic Film Formers; RE Krieger Publishing Co: New York, 1977, 263.
- [145] Wicks, Z. W.; Jones, F. N.; Pappas, S. P. Organic Coatings; John Wiley & Sons: New York, 1994, Vol. 1, 38-39.
- [146] Wade, L. G. Organic Chemistry; Greenwood Press: Prentice-Hall International edition: USA, 1991, 952.
- [147] Wang, S. T.; Schork, F. J.; Poehlein, G. W.; Gooch, J. W. J Appl Polym Sci 1996, 60, 2069.
- [148] Bruins, P. F. Unsaturated Polyester technology; Copyright by Gordon and Breach Science Publisher, Inc: New York, 1976, 319.
- [149] Akbarinezhad, E.; Ebrahimi, M.; Kassiriha, S.M.; Khorasani, M. Prog Org Coat, 2009, 65, 217.
- [150] Ayman, M. A.; Ibrahim, F. N.; hamed, M. B. React Funct Polym 2007, 67, 617.