

DAFTAR PUSTAKA

- Alfa, A. A. 2003. *Pengaruh Kombinasi Surfaktan dan Papain Menurunkan Kadar Protein Lateks dalam Pengolahan Lateks Alam Berprotein Rendah*. Prosiding Konferensi Agribisnis Karet Menunjang Industri Lateks dan Kayu, 303-316, Medan, 10-11 Desember 2003.
- Arizal, R. 1989. *Bahan Elastomer untuk Industri Barang Jadi Karet (Karet Alam dan Karet Sintetik)*. Latihan Teknologi Barang Jadi Karet. Balai Penelitian Teknologi Karet, Bogor.
- Barney, J. A. 1973. *Natural Rubber Productions Lectures Notes*. Balai Penelitian Perkebunan Bogor. Bogor.
- Blackley, D. C. 1966. *High Polymer Latices*. Palmerton Publishing Co. Inc. New York.
- Billmeyer, F. W. Jr. 1984. *Text Book of Polymer Science*. Third Edition, A Wiley Inter Science Publication.
- Campbell, D. S., Farley, P. S. 1995. *Acid-Catalysed Hydrolysis of Epoxidized Natural Rubber: Gel Formation During Latex Epoxidation*. United Kingdom: Journal Natural Rubber, 10(4), 242-254
- Coates, J. 2000. *Interpretation of Infrared Spectra, a Practical Approach Encyclopedia of Analytical Chemistry*. R.A. Meyers. p. 10815-10837.
- Cook, G., dan Philips. 1956. *Latex, Natural, and Synthetic*. A Reinhold Pilot Book. New York.
- Cooney, T. 2009. *Epoxidised Resins from Natrural Renewable Resources*, University of Southern Queensland.
- Cowd, M. A. 1991. *Kimia Polimer*. Penerbit ITB. Bandung.
- Declet-Perez, C. 2015. *Deformation Processes In Block Copolymer Toughened Epoxies*. Macromolecules 48:3672–3684.
- Djikman, M. J. 1951. *Hevea : Thirty Years of Research in The Far East*. University of Miami Press Coral Gables, Florida.
- Eng, A. H. 1997. *Distribution and Origin of Abnormal Group in Natural Rubber*. Journal Natural Rubber, Res. I(3), 156-166.
- Fathurrohman, M. I., Syamsu, Y. 2010. *Epoksidasi Karet Alam Dalam Fasa Lateks Menggunakan Asam Performat*. Jurnal Penelitian Karet, 2010, 28 (1) : 65-74.

- Fluit, C. F. 1948. *The Chemistry and Technology of Rubber Latex*, Ltd, New York.
- Fukushima, Y., Kawahara, S., and Tanaka, Y. 1998. *Synthesis of Graft Copolymer from Higher Deproteinised Natural Rubber*. Journal Rubber Res. I(3) : 155-166.
- Gazaley, F. K. 1988. *Technology processing of Natural Rubber Latex*. In *Natural Rubber Science and Technologie Oxford*. University Press.
- Gelling, I. R. 1991. *Epoxidized Natural Rubber*. Journal Natural Rubber, 6(1), 184.
- Goud, V. V., Patwardhan, A.V., and Pradhan N. C. 2006. *Studies on the Epoxidation of Mahua Oil (Madhumica Indica) by Hydrogen Peroxide*, Bioresour Technol.
- Goutara, B., Djatmiko, dan Tjiptadi, W. 1985. *Dasar Pengolahan Karet*. Agroindustri Press. Jurusan Teknologi Industri Pertanian. Fakultas Teknologi Pertanian. Institut Pertanian Bogor. Bogor.
- Gunanti, S. D. 2004. *Kajian Kemantapan Viskositas Mooney Karet Hasil Depolimerisasi Lateks Alam yang diberi Perlakuan Hidroksilamin Netral Sulfat (HNS)*. Fakultas Teknologi Pertanian. Institut Pertanian Bogor. Bogor.
- Harahap, N. A. 2009. *Penentuan Kadar Amonia dalam Lateks dalam Pengolahan Crumb Rubber di PT. Bridgestone*. Tugas Akhir Program Studi Diploma-3 Kimia Analis, Departemen Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam. Universitas Sumatera Utara. Medan.
- Heping, Y., Sidong, L., dan Zheng, P. 1999. *Preparation And Study Of Epoxidized Natural Rubber*. J. Therm. Anal. Calorim. 58: 293-299.
- Honggokusumo, S. 1978. *Pengetahuan Lateks. Kursus Pengolahan Barang Jadi Karet*. Balai Penelitian Perkebunan Bogor. Bogor.
- Hunstman. 2000. *Surfactant Handbook*. 2nd edition. John Wiley & Sons, Inc, New York.
- Anonim A. 2004. *Natural Rubber Latex Concentrate -- Centrifuged or Creamed, Ammonia Preserved Types – Specifications*. ISO-2004 (en).
- Killmann, W. 2001. *Forest Plantation Thematic Papers, Working Paper 6*. Forest Resources Development Service, Forest Resources Division. FAO, Rome.
- Klinklai, W., Kawahara, S. T., Mizumo, M., Yoshizawa, J.T., Sakdapipanich, Y., Isono, dan Ohno, H. 2003. *Depolymerization And Ionic Conductivity*

Of Enzymatically Deproteinized Natural Rubber Having Epoxy Group. Eur. Polym. J. 39: 1707- 1712.

- Keenan, U. K., Kleinfester, D. C., Demwood, J. A. 1989. *Kimia*. Erlangga. Jakarta.
- Kohjiya, S. 2014. *Chemistry, Manufacture and Applications of Natural Rubber*. Woodhead, Oxford, pp 353–370.
- Larkin, B. dan Morris, M. D. 1995. *Natural Rubber Lateks, Production, Composition, & Specification*. Latex Education Symposium 36. Division, A C S, Inc., Pennsylvania.
- Mathew, V. S., George, S. C., Parameswaranpillai, J., Thomas, S. 2014. *Epoxidized Natural Rubber/Epoxy Blends: Phase Morphology and Thermomechanical Properties*. J Appl Polym Sci 131.
- Meyer, L. H. 1966. *Food Chemistry*. Reinold Publishing Corp. New York.
- Muis, Y. 2007. *Pengaruh Penggumpalan Asam Asetat, Asam Formiat, dan Berat Arang Tempurung Kelapa Terhadap Mutu Karet*. Departemen Kimia FMIPA. Universitas Sumatra Utara. Medan.
- Nancy, C. 1988. *Usaha untuk Meningkatkan Daya saing Karet Alam Indonesia* (Tesis). Program Pasca Sarjana Institut Pertanian Bogor.
- Nazaruddin, dan Farry, B. P. 1992. *Karet, Strategi Pemasaran, Budidaya dan Pengolahan*. Penebar Swadaya. Jakarta.
- Nielzen, Suzanne, S. 2010. *Food Analysis, 4th Edn*. Purdue University. West Lafayette, IN, USA.
- Nobel, R. J. 1953. *Latex in Industry*. Rubber Age. New York.
- Okwu, U. N. dan Okieimen, F.E. 2001. Preparation and properties of thioglycollic acid modified epoxidised natural rubber and its blends with natural rubber. *Eur. Polym. J.* 37: 2253-2258.
- Pelczar, M & Chan. 2008. *Dasar-dasar Mikrobiologi*. Universitas Indonesia. Jakarta.
- Petri, E. M. 2005. *Epoxy Adhesive Formulations*. McGRAW-HILL, New York.
- Phinyocheep, P. and Boonjairak, K. 2006. *Investigation on Hydrogenation and Epoxidation of Natural Rubber in Latex Stage*. Departmen of Chemistry. Faculty of Science. Mahidol University. Bangkok.
- Pristiyanti, Elly, N. W. 2006. *Pengaruh Pengembangan Partikel Karet Terhadap Depolimerisasi Lateks Dengan Reaksi Reduksi-Oksidasi*. Fakultas Teknologi Pertanian. Institut Pertanian Bogor. Bogor.

- Ramadhan, A., Prastanto, H., dan Alfa, A. A. 2005. *Pengaruh Waktu Reaksi Depolimerisasi Terhadap Viskositas Mooney Karet Mentah Pada Proses Pembuatan Karet Alam Cair Sistem Redoks. Prosiding Aplikasi Kimia Dalam Pengelolaan Sumber Daya Alam Lingkungan*. Yayasan Media Utama. Yogyakarta.
- Reiger, M. M. 1985. *Surfactant in Cosmetics*. Surfactant Science Series, hal. 488. John Wiley & Sons, Inc, New York.
- Rivai, H. 1994. *Asas Pemeriksaan Kimia*. Penerbit Universitas Indonesia.
- Salager, J., Becher, P., ed. 1988. *Encyclopedia of Emulsion Technology*. Marcel Dekker, New York.
- Saramolee, P., Lapattananom, N., and Sahakaro, K. 2014. *Preparation and Some Properties of Modified Natural Rubber Bearing Grafted Poly (Methyl Methacrylate) and Epoxy Group*. European Polymer Journal, 56, 1-10. Thailand.
- Simpson, R. B. 2002. Rubber basics. Rapra Technology Limited, Shawbury, U.K., pp 151–153.
- Solichin, M., Hardiman, dan Kartika, B. 1995. *Faktor-Faktor yang Mempengaruhi Viskositas Mooney dalam Pengolahan SIR 3 CV*. Dalam. Jurnal Lateks, vol 6 nomor 2 Oktober 1991. Pusat penelitian Perkebunan Sembawa, Asosiasi Penelitian dan Pengembangan Perkebunan Indonesia.
- Suparto, D. 2002. *Pengetahuan tentang Lateks Hevea, Kursus Barang Jadi dari Lateks*. Balai Penelitian Teknologi Karet Bogor, Bogor.
- Sugata Chakraborty, Saptarshi Kar, Rohit Ameta, Saikat Dasgupta, dan Rabindra Mukhopadhyay. 2010. *Quantitative Application of FTIR in Rubber*. Rubber World. The Technical Magazine For The Rubber Industry, Vol. 241, No. 4, p. 32.
- Surdia, N. M. 2000. *Degradasi Polimer*. Jurnal Indonesia Polimer, Vol 3(1). Bandung.
- Suwarto, dan Yuke, O. 2010. *Budidaya 12 Tanaman Perkebunan Unggulan*. Penerbit Penebar Swadaya, Jakarta.
- Surya, I. 2006. *Buku Ajar Teknologi Karet*. Fakultas Teknik. Universitas Sumatra Utara. Medan.
- Tahir, A., Nuri, dan Roestamsjah. 1995. *Modifikasi Karet Alam Secara Hidrogenasi*. Simposium Nasional Himpunan Polimer Indonesia.
- Tanaka, Y., Sato, H., dan Kageyu, A. 1998. *Rubber Chemistry Technology*. 56, 299-303.

- Tanrattanakul, V., Wattanathai, B., Tiangjunya, A., dan Muhamud, P. 2003. *In situ epoxidized natural rubber: improved oil resistance of natural rubber*. *J. Appl. Polym Sci.* 90: 261269.
- Threadingham, D., Obrecht, W., Wieder, W., Wachholz, G., Engehausen, R. 2012. *Rubber, 3. Synthetic Rubbers, Introduction And Overview*. In: Ullmann's encyclopedia of industrial chemistry, vol 31, 8th edn. VCH, Weinheim, Germany, pp 597–616
- Triwijoso, S. U., dan Siswantoro, O. 1989. *Pedoman Teknis Pengawetan dan Pemekatan Lateks Havea*. Balai Penelitian Perkebunan Bogor. Bogor.
- Yu, H., Zeng, Z., Lu, G., Wang, Q. 2008. *Processing Characteristics and Thermal Stabilities of Gel and Sol of Epoxidized Natural Rubber*. Chinese Academy of Tropical Agriculture Science. China.