UNIVERSITAS
GADJAH MADA
PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Aries, R.S. and Newton, R.D., 1955, Chemical Engineering Cost Estimation, McGraw Hill Companies, Inc., New York.

Badan Meteorologi, Klimatologi, dan Geofisika. (2026). Laporan iklim harian Stasiun Meteorologi Maritim Serang tanggal 18 Mei 2026. BMKG.

Badan Pengkajian dan Penerapan Teknologi, Daftar Nama Perusahaan Fenol di Indonesia. Retrieved from : http://bppt.go.id/

Badan Pusat Statistik Data Ekspor Benzene (2019 – 2025). Retrieved from: https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.21.25

Badan Pusat Statistik Data Ekspor Phenol (hydroxybenzene) & its salts (2019 – 2025). Retrieved from: https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.18.11

Badan Pusat Statistik Data Impor Acetone (2019 – 2025). Retrieved from https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.22.52

Badan Pusat Statistik Data Impor Benzene (2019 – 2025). Retrieved from: https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.20.49

Badan Pusat Statistik Data Impor Phenol (hydroxybenzene) & its salts (2019 – 2025). Retrieved from : https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.18.11

Badan Pusat Statistik Data Impor Propylene (2020 – 2025). Retrieved from https://www.bps.go.id/id/exim diakses pada Senin, 10 November 2025 pukul 11.48.54

Badan Pusat Statistik Provinsi Banten. (2024). Tingkat Pengangguran Terbuka (TPT) Menurut Kabupaten/Kota di Provinsi Banten (persen). Retrieved from: https://banten.bps.go.id/id/statistics-table/2/MTU3IzI=/tingkat-pengangguran-terbuka-tpt-menurut-kabupaten-kota.html [Accesed 9 November 2025]

Badan Pusat Statistik Provinsi Banten. (2025). Laporan Eksekutif Keadaan Angkatan Kerja Provinsi Banten Februari 2025. Banten: BPS Provinsi Banten

PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Badan Pusat Statistik. (2026, 29 Juni). Suku bunga kredit rupiah menurut kelompok bank. Diakses 14 Juni 2026 dari https://www.bps.go.id/id/statistics-table/2/MzgzIzI=/suku-bunga-kredit-rupiah-menurut-kelompok-bank.html

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. Academy of Management Journal, 43(4), 717–736. https://doi.org/10.2307/1556363

Bo, Z., et al. (2020). Solar-enhanced plasma-catalytic oxidation of toluene over a MnO2 catalyst. ACS Sustainable Chemistry & Engineering, 8(11), 4500-4507.

Brown, G.G., Boyaju, D., Lil, M., O, U.E., Brown, G.M., Brownell, L.E., La, D., et al., 1950, Unit Operations.

Brownell, L.E. and Young, E.H., 1959, Process Equipment Design.

Chemical Engineering Online. (2021). Diakses 17 Juni 2025 dari www.chemengonline.com

Coker, A.K., 2007, Ludwig's Applied Process Design for Chemical and Petrochemical Plants Fourth Edition, Vol. I, Elsevier Inc.

Crowl, D. A., & Louvar, J. F. (2019). Chemical Process Safety Fundamentals with Applications (Fourth Edi). Pearson Education, Inc.

Daily, B. F., & Huang, S. (2001). Achieving sustainability through attention to human resource factors in environmental management. International Journal of Operations & Production Management, 21(12), 1539–1552. https://doi.org/10.1108/01443570110410892

Darnall, N., Henriques, I., & Sadorsky, P. (2008). Do environmental management systems improve business performance in an international setting? Journal of International Management, 14(4), 364–376. https://doi.org/10.1016/j.intman.2007.09.006

Dunn, W. C. (2005). Fundamentals of Indrustial Instrumentation and Process Control. McGraw-Hill.

ECHEMI Benzene (6th November 2025) Retrieved from : https://www.echemi.com/productsInformation/pid_Seven2868-benzene.html

Fachriani, A. A., Sabara, Z., & Kalla, R. (2024). Pra rancangan pabrik bisfenol-A dari aseton dan fenol kapasitas 50.000 ton/tahun. Journal of Materials Processing and Environment, 2(1).

UNIVERSITAS
GADJAH MADA
PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Fayol, H. (1954). General and Industrial Mangaement. https://ia904707.us.archive.org/22/items/in.ernet.dli.2015.13518/2015.13518.General-And-Industrial-Management.pdf

Fransisco, A. (2010). Pra rencana pabrik phenol dari cumene hidroperoksida (Tugas Akhir, Institut Teknologi Nasional).

Gammahendra, F., Hamid, D., & Riza, M. F. (2014). Pengaruh Struktur Organisasi Terhadap Efektivitas Organisasi Dalam Suatu Perusahaan. Jurnal Administrasi Bisnis, 7(2).

Global Asset Protection Services LLC. (2001). Oil and Chemical Plant Layout and Spacing. GAPS Guidelines, GAP.2.5.2, 1–13.

Hasibuan, F. A. (2024). View of process simulation of cumene production via alkylation of benzene and propylene. Jurnal Rekayasa, Teknologi Proses dan Sains, [online].

Hillary, R. (2004). Environmental management systems and the smaller enterprise. Journal of Cleaner Production, 12(6), 561–569. https://doi.org/10.1016/j.jclepro.2003.08.006

Holt, D. (2004). Managing the interface between suppliers and organizations for environmental responsibility. Corporate Social Responsibility and Environmental Management, 11(2), 71–84. https://doi.org/10.1002/csr.55

International Agency for Research on Cancer. (2018). IARC monographs on the identification of carcinogenic hazards to humans. World Health Organization. https://monographs.iarc.who.int/

International Organization for Standardization. (2015). Environmental management systems — Requirements with guidance for use (ISO Standard No. 14001:2015). https://www.iso.org/standard/60857.html

ISO. (2015). ISO 14001:2015 Environmental Management Systems — Requirements with Guidance for Use. International Organization for Standardization.

Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia. (2017). Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor P.19 Tahun 2017 tentang Baku Mutu Emisi Gas Buang. Berita Negara Republik Indonesia Tahun 2017 Nomor 1016.

UNIVERSITAS
GADJAH MADA
PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Kementerian Lingkungan Hidup dan Kehutanan. (2024). Laporan Kinerja Pengelolaan dan Perlindungan Lingkungan Tahun 2024 (Revisi 3). Jakarta: Kementerian Lingkungan Hidup dan Kehutanan.

Kementerian Perindustrian Republik Indonesia, Pabrik Bisphenol-A, Resin Fenolic, Annilin. Retrieved from : https://tkdn.kemenperin.go.id

Kirk, R. E., & Othmer, D. F. (Eds.). (1982). Kirk-Othmer Encyclopedia of Chemical Technology (3rd ed.). John Wiley & Sons

Morrow, D., & Rondinelli, D. (2002). Adopting corporate environmental management systems: Motivations and results of ISO 14001 and EMAS certification. European Management Journal, 20(2), 159–171. https://doi.org/10.1016/S0263-2373(02)00026-9

Nfodzo, P., Dionysiou, D.D. and Choi, H., 2012, Water supply and treatment, Encycl. Environmetrics, 3 (September), available at:https://doi.org/10.1002/9780470057339.vnn119.

Occupational Safety and Health Administration. (2013). Process safety management of highly hazardous chemicals (Standard No. 1910.119). U.S. Department of Labor. https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.119

Occupational Safety and Health Administration. (2023). Emergency action plans (Standard No. 1910.38). U.S. Department of Labor. https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.38

Occupational Safety and Health Administration. (2023). Hazardous waste operations and emergency response (Standard No. 1910.120). U.S. Department of Labor. https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.120

Pemerintah Provinsi Jawa Tengah. (2024). Lampiran Upah Minimum Kabupaten/Kota dan Upah Minimum Sektoral di Provinsi Jawa Tengah Tahun 2025.

Pemerintah Republik Indonesia. (2001). Peraturan Pemerintah Nomor 82 Tahun 2001 tentang Pengelolaan Kualitas Air dan Pengendalian Pencemaran Air beserta Lampiran Baku Mutu Air. Lembaran Negara Republik Indonesia Tahun 2001 Nomor 153.

Perry, R.H. and Green, D.W., 1997, Perry's Chemical Engineers Handbook (7th Edition). Powell, S.T., 1954, WATER CONDITIONING FOR INDUSTRY (First Edition), McGraw-Hill, Inc.

PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Perry, R.H., 1997, Perry's Chemical Engineers Handbook.

Peters, M. S., Timmerhaus, K. D., & West, R. E. (2003). Plant design and economics for chemical engineers (5th ed.). McGraw-Hill.

Pun, K. F., & Hui, I. K. (2001). Integrating the safety dimension into quality management systems: A process model. Total Quality Management, 12(3), 373–391. https://doi.org/10.1080/09544120120034448

Republik Indonesia. (1970). Undang-Undang Nomor 1 Tahun 1970 tentang Keselamatan Kerja. Lembaran Negara Republik Indonesia Tahun 1970 Nomor 1.

Rondinelli, D., & Vastag, G. (2000). Panacea, common sense, or just a label? The value of ISO 14001 environmental management systems. European Management Journal, 18(5), 499–510. https://doi.org/10.1016/S0263-2373(00)00033-6

Rosyidiin, A. F., Nugroho, A., & Amrullah, H. N. (2017). ANALISIS RISIKO DENGAN METODE LAYER OF PROTECTION ANALYSIS PADA REAKTOR PLATFORMING DI INDUSTRI PETROKIMIA.

Sinnott, R & Towler, G. (2005) Chemical Engineering Design. 4th Edition, ButterworthHeinemann, Oxford.

Sinnott, R. and Towler, G., 2019, Chemical Engineering Design, Chem. Eng. Des. SI Ed., available at:https://doi.org/10.1016/B978-0-08-102599-4.09980-X

Supriyatin. (2013). Manajemen Produksi dan Operasi. 2.

Tinsley, S., & Pillai, I. (2006). Environmental Management Systems: Understanding Organizational Drivers and Barriers. Earthscan.

Treybal, R.E., 1980, MASS-TRANSFER OPERATIONS, edited by Carberry, J.J., Fair, J.R., Peters, M.S., Schowalter, W.R. and Wei, J., McGraw-Hill, Inc. Windsor, B., 2016, Ion Exchange Design – Hand Calculation.

Ullmann. (2016). Ullmann's Encyclopedia of Industrial Chemistry (7th ed.). Wiley-VCH.

Ulrich, G. D. (1984). A Guide to Chemical Engineering Process Design and Economics. 484.

Weissermel, K., & Arpe, H.-J. (2008). Industrial Organic Chemistry (4th ed.). Wiley-VCH.

UNIVERSITAS
GADJAH MADA
PRARANCANGAN PABRIK FENOL DARI BENZENA DAN PROPILENA DENGAN KAPASITAS 60.000 TON/TAHUN
Mikael Kevin Christian Nugroho, Prof. Ir. Chandra Wahyu Purnomo, S.T., M.E., M.Eng., D.Eng., IPM.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Yaws, C.L. (1999). Chemical Properties Handbook : Physical, Thermodynamic, Environmental, Transport, Safety, and Health Related Properties for Organic and Inorganic Chemicals. McGraw-Hill.

Ziphora, F. (2022). Pentingnya Sistem Manajemen dan Struktur Organisasi dalam Suatu Usaha. Leadership and Management in Engineering, 12(1), 20–23.

Zulmayeti, L., Naufal, M. F., (2018). Prarencana pabrik pembuatan fenol kapasitas produksi 89.000 ton/tahun (Skripsi, Jurusan Teknik Kimia, Fakultas Teknik, Universitas Sriwijaya).