

## DAFTAR PUSTAKA

- Aboosadi, A., dkk. 2011. “*Optimization of tri-reformer reactor to produce synthesis gas for methanol production using differential evolution (DE) method*”. Applied Energy 88 (2011) 2691–2701.
- Analisis Dampak Lingkungan Hidup (ANDAL) Kegiatan Terpadu Proyek Pengembangan Tangguh LNG SKK migas
- Andrigo, P., Bagatin, R. and Pagani, G. (1999) *Fixed bed reactors, Catalysis Today*. doi: 10.1016/S0920-5861(99)00076-0
- Arch Chemical, Inc. 1999. *Safety And Handling of Hydrazine Solution*. Washington DC.
- Aries, R. S., and Newton, R. D., 1955, *Chemical Engineering Cost Estimation*, McGraw-Hill, New York.
- Aylsworth, J. (1984) ‘COAL.’, *Canadian Mining Journal*.
- Bappenas (2016) ‘Laporan Akhir: Kajian Ketercapaian Target DMO Batubara Sebesar 60% Produksi Nasional pada Tahun 2019’, pp. 1–115.
- Bartholomew, C. H. (1982) *Fundamentals of Industrial Catalytic Processes, Food and Chemical Toxicology*. doi: 10.1016/S0015-6264(82)80243-5.
- Baruah, D. and Baruah, D. C. (2014) ‘*Modeling of biomass gasification: A review*’, *Renewable and Sustainable Energy Reviews*. doi: 10.1016/j.rser.2014.07.129.
- Bell, D., & Towler, B. (2011). *Coal Gasification and Its Applications*. In *Coal Gasification and Its Applications*. <https://doi.org/10.1016/C2009-0-20067-5>
- Bhattacharyya, D., Turton, R., & Zitney, S. E. (2017). *Acid gas removal from syngas in IGCC plants. Integrated Gasification Combined Cycle (IGCC) Technologies*, 385–418. doi:10.1016/b978-0-08-100167-7.00011
- Brink, D. L. (2018) ‘Gasification’, in *Organic Chemicals from Biomass*. doi: 10.1201/9781351075251.
- Brown, G. G., Katz, D., Foust, A. S., and Schneidewind, C., 1950, “*Unit Operation*”, John Wiley and Sons, Inc., New York.

- Brownell, L.E. and E.H. Young, 1959, “*Process Equipment Design Handbook*”, Jogn Wiley and Sons, Inc., New York.
- Burr, B., & Lyddon, L. (2008). *A comparison of physical solvents for acid gas removal. GPA Annual Convention Proceedings*.
- Coulson, J.M., and J.F. Richardson, 1983, “*Chemical Engineering Design*”, 3ed., Butterworth Heinemann, London.
- Couper, J. R., Penney, W. R., Fair, J. R., & Walas, S. M. (2012). “*Chemical Process Equipment Selection and Design Third Edition*”. Oxford: Elsevier Inc.
- Crowl, D.A, Louvar, J.F. 2002. *Chemical Process Safety*. Prentice Hall. New Jersey.
- Davidson, G. (2010). “Adsorbents for Process”, 11.
- Engineering ToolBox, (2008). *Ethane - Thermophysical Properties*. [online] Available at: [https://www.engineeringtoolbox.com/ethane-d\\_1417.html](https://www.engineeringtoolbox.com/ethane-d_1417.html) [Accessed Day Mo. Year].
- Engineering ToolBox, (2018). *Ethylene - Thermophysical Properties*. [online] Available at: [https://www.engineeringtoolbox.com/ethylene-ethene-C2H4-properties-d\\_2104.html](https://www.engineeringtoolbox.com/ethylene-ethene-C2H4-properties-d_2104.html) [Accessed Day Mo. Year].
- Engineering ToolBox, (2008). *Propane - Thermophysical properties*. [online] Available at: [https://www.engineeringtoolbox.com/propane-d\\_1423.html](https://www.engineeringtoolbox.com/propane-d_1423.html) [Accessed Day Mo. Year].
- Estelle, M. (2002) ‘Plant Hormones’, *Encyclopedia of Genetics*, pp. 1480–1481. doi: 10.1006/rwgn.2001.0998.
- European Comission. 2006. “*Emission from Storage*”. Best Available Techniques Document.
- Evans, F. L., 1979, *Equipment design handbook for refineries and chemical plants*, Book Division Gulf Pub.
- Foust, A.S., 1980, “*Principles of Unit Operation*”, 2<sup>nd</sup> ed., John Willey and Sons Inc., New York.
- Gas, P., & Company, E. P. (2001). *Methane Gas Liquid Methane Nfpa Rating*. 8. Retrieved from

<http://www.pge.com/includes/docs/pdfs/shared/environment/pge/cleanair/methane1033.pdf>

- Gräbner, M. (2014). *Industrial Coal Gasification Technologies Covering Baseline and High-Ash Coal*. In *Industrial Coal Gasification Technologies Covering Baseline and High-Ash Coal*. <https://doi.org/10.1002/9783527336913>
- Haan, D., & Havant, A. E. E. (2013). ( 12 ) *United States Patent* ( 45 ) *Date of Patent : Primary Examiner — Thuan D Dang* ( 74 ) *Attorney , Agent , or Firm Osha Liang LLP*. 2(12).
- Hadi, N. et al. 2014. “*Development of a New Kinetic Model for Methanol to Propylene Process on Mn/H-ZSM-5 Catalyst.*” *Chemical and Biochemical Engineering Quarterly* 28(1): 53–63.
- Hannula, I., & Arpiainen, V. (2015). *Light olefins and transport fuels from biomass residues via synthetic methanol: performance and cost analysis*. *Biomass Conversion and Biorefinery*, 5(1), 63–74.  
<https://doi.org/10.1007/s13399-014-0123-9>
- Haryanto, A. et al. (2005) ‘*Current status of hydrogen production techniques by steam reforming of ethanol: A review*’, *Energy and Fuels*. doi: 10.1021/ef0500538.
- Haverford, Grosse, A. W. and Snyder, J. C. (1950) ‘*Methanol Production*’, pp. 3–6.
- Higman, C. and van der Burgt, M. (2003) *Gasification, Gasification*. doi: 10.1016/B978-0-7506-7707-3.X5000-1.
- Kern, D.Q., 1965, “*Process Heat Transfer*”, Int.ed., p. 102-160, New York, McGraw-Hill Book Company.
- Kunii, D. and Levenspiel, O. (1991) *Fluidization Engineering*. 2nd Edition, Butterworth-Heinemann, Boston
- Levenspiel, O. (1999) *Chemical Reaction Engineering*. John Wiley & Sons, Hoboken.
- Li, J. et al. (2011) ‘*Comparative study of MTO conversion over SAPO-34, H-ZSM-5 and H-ZSM-22: Correlating catalytic performance and reaction*

- mechanism to zeolite topology*, *Catalysis Today*. Elsevier B.V., 171(1), pp. 221–228. doi: 10.1016/j.cattod.2011.02.027.
- Li, X. T. *et al.* (2004) '*Biomass gasification in a circulating fluidized bed*', *Biomass and Bioenergy*. doi: 10.1016/S0961-9534(03)00084-9.
- Liping, L. *et al.* (2015) '*Synthesis of sapo-34/zsm-5 composite and its catalytic performance in the conversion of methanol to hydrocarbons*', *Journal of the Brazilian Chemical Society*, 26(2), pp. 290–296. doi: 10.5935/0103-5053.20140279.
- Liquide, A. I. R. (2018). *Carbon monoxide NOAL\_0019*.
- Liu, Z. and Liang, J. (1999) '*Methanol to olefin conversion catalysts*', *Current Opinion in Solid State and Materials Science*, 4(1), pp. 80–84. doi: 10.1016/S1359-0286(99)80015-1.
- Lücking, L. . (2017) '*Methanol Production from Syngas*', *Netherlands:Delft University of Technology*, p. 113.
- Material Safety Data Sheet.
- Mathieu, P. and Dubuisson, R. (2002) '*Performance analysis of a biomass gasifier*', in *Energy Conversion and Management*. doi: 10.1016/S0196-8904(02)00015-8.
- MEGS. (2000). *MSDS 1-Pentene*.
- National Center for Biotechnology Information. PubChem Database. N-Methyldiethanolamine, CID=7767, <https://pubchem.ncbi.nlm.nih.gov/compound/N-Methyldiethanolamine> (accessed on July 7, 2019)
- National Center for Biotechnology Information. PubChem Database. Piperazine, CID=4837, <https://pubchem.ncbi.nlm.nih.gov/compound/Piperazine> (accessed on July 7, 2019)
- National Center for Biotechnology Information. PubChem Database. Water, CID=962, <https://pubchem.ncbi.nlm.nih.gov/compound/Water> (accessed on July 7, 2019)
- Number, E., Measures, F. A. I. D., Measures, F. F., The, C., & Afrox, N. (2014).

*MATERIAL SAFETY DATA SHEET ( MSDS ) PROPANE Please ensure that this MSDS is received by the appropriate person. (February), 1–2.*

Number, E., & Identification, H. (2015). *Signal Word : Danger Precautionary Statements : Labelling Elements* : (September), 1–4.

Occupational Safety and Health Act. 2000. *Process Safety Management*. U.S. Department of Labor.

Panahi, Pn., N., dkk. 2012. “Simulation of methanol synthesis from synthesis gas in fixed bed catalytic reactor using mathematical modeling and neural networks”. *International Journal of Scientific & Engineering Research* Volume 3.

Paper, C., Hidayu, N., Rani, A., & Teknologi, U. (2015). *Enhancement of Methyl-diethanolamine ( Mdea ) Absorption Capacity for Co 2 Capture Using Amine ...* (August).

Peraturan Pemerintah Republik Indonesia No. 41 Tahun 1999 tentang Pengendalian Pencemaran Udara

Peraturan Menteri Negara Lingkungan Hidup No. 03 Tahun 2010 tentang Baku Mutu Air Limbah bagi Kawasan Industri

Perry, R.H., 1999, “*Perry’s Chemical Engineer’s Handbook*”, 7 ed., p. 2.37-2.38, New York, McGraw-Hill Book Company.

Peters, M. S., and Timmerhaus, K. D., 1991, *Plant Design and Economics for Chemical Engineers*, 4th ed., McGraw-Hill, Singapore.

Powell, S.T., 1954, “*Water Conditioning for Industry*”, 1<sup>st</sup> ed., Mc Graw Hill Book Co., Tokyo.

Rase, H. F., and Barrow, M. H., 1977, “*Chemical Reactor Design for Process Plant*”, 1st ed., Mc Graw Hill Book Company, Inc., New York.

Rostami, R. B., Lemraski, A. S., Ghavipour, M., Behbahani, R. M., Shahraki, B. H., & Hamule, T. (2016). *Kinetic modelling of methanol conversion to light olefins process over silicoaluminophosphate (SAPO-34) catalyst. Chemical Engineering Research and Design.*

<https://doi.org/10.1016/j.cherd.2015.10.019>

- Sheet, S. D. (2019). *Methanol SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : Substance Substance name : Methanol*. 77(58), 1–10. Retrieved from [www.big.be/antigif.htm](http://www.big.be/antigif.htm)
- Sinnott, R. K., 1983, “*Coulson & Richardson’s Chemical Engineering Series : Chemical Engineering Design*”, Chemical Engineering vol. 6 4th ed., Elsevier Butterworth-Heinemann, Oxford.
- Sinnott, R.K., 2005, “*Chemical Engineering Design*”, 4 ed., p. 587-609, Oxford, Elsevier.
- Sihite, Thamrin, 2012, *Low Rank Coal Utilization in Indonesia*, Clean Coal Day in Japan 2012 International Symposium, Tokyo.
- Smith, J.M., Ness, H.C.V., Abbott, M.M., 2001, “*Chemical Engineering Thermodynamics*”, Volume 6, p.635-636, New York, Mc Graw Hill.
- Subdirektorat Statistik Impor .2013. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- Subdirektorat Statistik Impor .2014. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- Subdirektorat Statistik Impor .2015. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- Subdirektorat Statistik Impor .2016. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- Subdirektorat Statistik Impor .2017. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- Subdirektorat Statistik Impor .2018. Statistik Perdagangan Luar Negeri Foreign Trade Statistical Bulletin. Jakarta : Badan Pusat Statistik.
- TanyaPALMER. (2007). *Safety Data Sheet HYDROGEN, COMPRESSED (H2) Danger SECTION 1: Identification of the substance/mixture and of the company/undertaking*. 1–9.
- The Linder Group. (2017). *Material Safety Data Sheet (Msds) Carbon Dioxide*. (March). Retrieved from

[http://www.afrox.co.za/en/images/Carbon\\_Dioxide266\\_167209\\_tcm266-167209.pdf](http://www.afrox.co.za/en/images/Carbon_Dioxide266_167209_tcm266-167209.pdf)

- Toporov, D., Böttcher, J., & Abraham, R. (2014). *HTW-based Gasification of Indonesian Low Rank Coals as an Alternative for an Efficient and Sustainable Production of Chemicals*. Asian Nitrogen + Syngas Conference 2014.
- Treybal, R.E., 1981, “*Mass-Transfer Operations*”, Int.ed., p. 139-210, Singapore, McGraw-Hill Book Company.
- Tucker, G. *et al.* (2017) *Ethylene, Food Quality and Safety*. doi: 10.1093/fqsafe/fyx024.
- Wahabi, S., 2003., “*Conversion of Methanol to Light Olefins on SAPO-34 Kinetic Modeling and Reactor Design*”. Graduate Studies of Texas A&M University.
- Welty, J.R., Wicks, C.E., Wilson, R.E., Rorrer, G., 2005, “*Fundamentals of Momentum, Heat and Mass Transfer*”, 4 ed., p. 421.451, John Willey & Sons, Inc., New York.
- Yaws, C.L., 1999, “*The Yaws Handbook of Vapor Pressure : Antoine Coefficients*”, p.80-534. Oxford, Elsevier.
- Young, E.H., and Brownell, L. E., 1979, *Process Equipment Design*, John Wiley and Sons, Inc., New York. Evans, F. L., 1980, “*Equipment Design Handbook*”, Gulf Publising Company, Tokyo.
- <http://matche.com>, diakses pada tanggal 21 Desember 2019.
- <http://www.mhhe.com>, diakses pada tanggal 21 Desember 2019.
- <http://www.bi.go.id>, diakses pada tanggal 30 Desember 2019