

DAFTAR PUSTAKA

1. Windriyati YN, Shabrina A. Disolusi Dan Karakter Fisikokimia Asam Fenofibrat Dalam Dispersi Padat Permukaan Dengan Sodium Starch Glycolate. 2019.
2. Niraimathi V, Suresh AJ, Alageswaran A. UV Spectrophotometric Determination of Fenofibric Acid By Using Hydrotropy. 2015;6(02):451–8.
3. Umar S, Putri N, Deni B, Erizal A. Multicomponent Crystal of Fenofibric Acid- Saccharin : Characterization and Antihyperlipidemic Effectiveness. 2021;40(Iccscp):104–9.
4. Windriyati YN, Sumirtapura YC, Pamudji JS. Dissolution enhancement and physicochemical characterization of fenofibric acid in surface solid dispersion with croscarmellose sodium. Marmara Pharm J. 2019;23(2):315–25.
5. Oladimeji FA, Adegbola AJ, Onyeji CO. Appraisal of Bioenhancers in Improving Oral Bioavailability: Applications to Herbal Medicinal Products. J Pharm Res Int. 2018;24(4):1–23.
6. Kim KS, Kim JH, Jin SG, Kim DW, Kim DS, Kim JO, et al. Effect of magnesium carbonate on the solubility, dissolution and oral bioavailability of fenofibric acid powder as an alkalisng solubilizer. Arch Pharm Res. 2016;39(4):531–8.
7. Wei X, Li P, Liu M, Du Y, Wang M, Zhang J, et al. Absolute oral bioavailability of fenofibric acid and choline fenofibrate in rats determined by ultra-performance liquid chromatography tandem mass spectrometry. Biomed Chromatogr. 2017;31(4).
8. Christopher Vimalson D, Parimalakrishnan S, Jeganathan NS, Anbazhagan S. Techniques to enhance solubility of hydrophobic drugs: An overview. Asian J Pharm. 2016;10(2):S67–75.
9. Yousaf AM, Ramzan M, Shahzad Y, Mahmood T, Jamshaid M. Fabrication and in vitro characterization of fenofibric acid-loaded

- hyaluronic acid–polyethylene glycol polymeric composites with enhanced drug solubility and dissolution rate. *Int J Polym Mater Polym Biomater*
- 10. Suhery WN, Sumirtapura YC, Pamudji JS, Mudhakir D. Development and characterization of self-nanoemulsifying drug delivery system (Snedds) formulation for enhancing dissolution of fenofibric acid. *J Res Pharm.* 2020;24(5):738–47.
 - 11. Nugrahani I, Auli WN. Diclofenac-proline nano-co-crystal development, characterization, in vitro dissolution and diffusion study. *Heliyon*
 - 12. Salman Umar *et al.* Dissolution Rate Enhancement and Physicochemical Characterization of a Fenofibric Acid-Saccharin Eutectic Mixture. *2021;5(9):1614-1618*
 - 13. Moore MD, Wildfong PLD. Aqueous Solubility Enhancement Through Engineering of Binary Solid Composites : Pharmaceutical Applications. *2009;36–49.*
 - 14. Aungst BJ, Nguyen NH, Taylor NJ, Bindra DS. Formulation and food effects on the oral absorption of a poorly water soluble, highly permeable antiretroviral agent. *J Pharm Sci.* 2002;91(6):1390–5.
 - 15. Liu P. Nanocrystal formulation for poorly soluble drugs. 2013.
 - 16. Ma J, Yang Y, Sun Y, Sun J. Optimization , characterization and in vitro / vivo evaluation of azilsartan nanocrystals Corresponding author : Corresponding author : Jin Sun * Graphical Abstract Through formulation screening , the irregular-shaped azilsartan nanocrystals was prepared . *Asian J Pharm Sci*
 - 17. Elmer P, Ling H, Luoma JT, Hilleman D. A Review of Currently Available Fenofibrate and Fenofibric Acid Formulations. *2013;4(2):47–55.*
 - 18. Profile D. Fenofibrate : treatment of hyperlipidemia and beyond. *2008;6(10):1319–30.*
 - 19. Health V. Fenofibric acid : a new fibrate approved for use in combination with statin for the treatment of mixed dyslipidemia. *2010;351–62.*
 - 20. Theodosios D Filippatos & Moses S Elisaf. Fenofibrate plus simvastatin (fixed-dose combination) for the treatment of dyslipidaemia. *2011;1945–58.*

21. National Center for Biotechnology Information. PubChem Compound Summary for CID 71314691, 2-Chloro Fenofibric Acid-d6. Retrieved December 30, 2021 from <https://pubchem.ncbi.nlm.nih.gov/compound/2-Chloro-Fenofibric-Acid-d6>. 2021.
22. Vanbever R, Ben-Jebria A, Mintzes JD, Langer R, Edwards DA, Linck V de M, et al. (12) Patent Application Publication (10) Pub . No . : US 2009 / 0220638A1. Int J Pharm
23. Zhu T, Ansquer JC, Kelly MT, Sleep DJ, Pradhan RS. Comparison of the gastrointestinal absorption and bioavailability of fenofibrate and fenofibric acid in humans. *J Clin Pharmacol.* 2010;50(8):914–21.
24. Tsume Y, Mudie DM, Langguth P, Amidon GE, Amidon GL. The Biopharmaceutics Classification System: Subclasses for in vivo predictive dissolution (IPD) methodology and IVIVC. *Eur J Pharm Sci*
25. Rowe, R. C., Sheskey, P. J., Quinn, M. E. *Handbook Of Pharmaceutical Excipients* 6th Ed. London: The Pharmaceutical Press. 2009
26. Anggraini D, Umar S, Arifin H, Zaini E. Dissolution rate enhancement and physicochemical characterization of a fenofibric acid–nicotinamide eutectic mixture. *Trop J Nat Prod Res.* 2021;5(9):1614–8.
27. Varma MM, Pandi JK. Dissolution, solubility, XRD, and DSC studies on flurbiprofen-nicotinamide solid dispersions. *Drug Dev Ind Pharm.* 2005;31(4–5):417–23.
28. Baltimor M E. USP 30-NF 25. USP Convention. 2007.
29. Pharmacopea B. No Title. 2009;
30. Fricker RA, Green EL, Jenkins SI GS. The Influence of Nicotinamide on Health and Disease in the Central Nervous System. *Int J Tryptophan Res.* 2018;11.
31. Li X, Ou X, Wang B, Rong H, Wang B, Chang C et al. Rich polymorphism in nicotinamide revealed by melt crystallization and crystal structure prediction. *Commun Chem.* 2020;
32. Giannopoulou I, Saïs F, Thomopoulos R. Linked data annotation and fusion driven by data quality evaluation. *Rev des Nouv Technol l'Information.* 2015;E.28:257–62.
33. Psimadas D, Georgoulias P, Valotassiou V, Loudos G. Molecular

- Nanomedicine Towards Cancer : J Pharm Sci. 2012;101(7):2271–80.
- 34. Rodrigues M, Baptista B, Lopes JA, Sarraguça MC. Pharmaceutical cocrystallization techniques. Advances and challenges. Int J Pharm
 - 35. Khankari RK, Law D, Grant DJW. Determination of water content in pharmaceutical hydrates by differential scanning calorimetry. Int J Pharm. 1992;82(1–2):117–27.
 - 36. Aaltonen J, Allesø M, Mirza S, Koradia V, Gordon KC, Rantanen J. Solid form screening - A review. Eur J Pharm Biopharm
 - 37. Rodrigues M, Lopes J, Sarraguça M. Vibrational spectroscopy for cocrystals screening. A comparative study. Molecules. 2018;23(12):1–15.
 - 38. Sarma B, Chen J, Hsi HY, Myerson AS. Solid forms of pharmaceuticals: Polymorphs, salts and cocrystals. Korean J Chem Eng. 2011;28(2):315–22.
 - 39. Miroshnyk I, Mirza S, Sandler N. Pharmaceutical co-crystals - An opportunity for drug product enhancement. Expert Opin Drug Deliv. 2009;6(4):333–41.
 - 40. Qiao N, Li M, Schlindwein W, Malek N, Davies A, Trappitt G. Pharmaceutical cocrystals: An overview. Int J Pharm
 - 41. Zaini E, Andalas U. Cocrystalline Phase Transformation of Binary Mixture of Asian Journal Of Pharmaceutical And Clinical Research Cocrystalline Phase Transformation Of Binary Mixture Of Trimethoprim And. 2014
 - 42. Zalte AG, Darekar AB, Gondkar SB. Cocrystals : An Emerging Approach to Modify Physicochemical Properties of Drugs. Am J PharmTech Res. 2014;4(January).
 - 43. Karashima M, Kimoto K, Yamamoto K, Kojima T, Ikeda Y. A novel solubilization technique for poorly soluble drugs through the integration of nanocrystal and cocrystal technologies. Eur J Pharm Biopharm
 - 44. Junyaprasert VB, Morakul B. Nanocrystals for enhancement of oral bioavailability of poorly water-soluble drugs. Asian J Pharm Sci
 - 45. Fontana F, Figueiredo P, Zhang P, Hirvonen JT, Liu D, Santos HA. Production of pure drug nanocrystals and nano co-crystals by confinement methods. Adv Drug Deliv Rev
 - 46. Chang TL, Zhan H, Liang D, Liang JF. Nanocrystal technology for drug

- formulation and delivery. *Front Chem Sci Eng.* 2015;9(1):1–14.
47. Van Eerdenbrugh B, Van den Mooter G, Augustijns P. Top-down production of drug nanocrystals: Nanosuspension stabilization, miniaturization and transformation into solid products. *Int J Pharm.* 2008;364(1):64–75.
48. Peltonen L, Hirvonen J. Pharmaceutical nanocrystals by nanomilling: Critical process parameters, particle fracturing and stabilization methods. *J Pharm Pharmacol.* 2010;62(11):1569–79.
49. Ochi M, Kawachi T, Toita E, Hashimoto I, Yuminoki K, Onoue S, et al. Development of nanocrystal formulation of meloxicam with improved dissolution and pharmacokinetic behaviors. *Int J Pharm*
50. Jindal K. Review on Solubility: a Mandatory Tool for Pharmaceuticals. *Int Res J Pharm.* 2017;8(11):11–5.
51. Dickinson PA, Howells SW, Kellaway IW. Novel nanoparticles for pulmonary drug administration. *J Drug Target.* 2001;9(4):295–302.
52. Ye Y, Zhang X, Zhang T, Wang H, Wu B. Design and evaluation of injectable niclosamide nanocrystals prepared by wet media milling technique. *Drug Dev Ind Pharm.* 2015;41(9):1416–24.
53. Gülsün T, Gürsoy RN, Öner L. Nanocrystal technology for oral delivery of poorly water-soluble drugs. *Fabad J Pharm Sci.* 2009;34(1):55–65.
54. Li J, Wang Z, Zhang H, Gao J, Zheng A. Progress in the development of stabilization strategies for nanocrystal preparations. *Drug Deliv*
55. Moorthi C, Kathiresan K. Fabrication of highly stable sonication assisted curcumin nanocrystals by nanoprecipitation method. *Drug Invent Today*
56. Setiabudi ARHAM. Karakterisasi Material: Prinsip dan Aplikasinya dalam Penelitian Kimia. Vol. 1, UPI Press. 2012. 37–39 p.
57. Risfaheri. Masalah dan Standar Mutu LAda, Monograf Tanaman Lada. *J Sains Farm Klin.* 2019;6(2):210–20.
58. Monzurul Amin Roni 1, Mahmud Hasan Dipu 1, Golam Kibria*2, Hafizur Rahman 3 MRR 3 and R-UJ 2. Dissolution Enhancement of Poorly Soluble Carbamazepine By Using. *Int J Pharm Sci Res.* 2011;2(1):49–57.
59. Jr AA, Nobre FD, Costa FA. The spin-1 Ising spin glass: a

- renormalization-group approach The spin-1 Ising spin glass: a renormalization-group approach. 5713.
- 60. Pralhad T, Rajendrakumar K. Study of freeze-dried quercetin-cyclodextrin binary systems by DSC, FT-IR, X-ray diffraction and SEM analysis. *J Pharm Biomed Anal*. 2004;34(2):333–9.
 - 61. Sinko PJ. Solubility and distribution phenomena. Martin's Phys Pharm Pharm Sci Phys Chem Biopharm Princ Pharm Sci Sixth Ed. 2013;182–96.
 - 62. Alatas F, Ratih H, Kurnia H, Soewandhi SN. Solubility Enhancement of Clozapine Through Co-Crystal Formation with Isonicotinamide. *Indones J Pharm*. 2019;2(1):1–6.
 - 63. Kemenkes RI. Farmakope Indonesia edisi VI. Departemen Kesehatan Republik Indonesia. 2020. 2371 p.
 - 64. Sagala RJ. Review: Metode Peningkatan Kecepatan Disolusi Dikombinasi Dengan Penambahan Surfaktan. *J Farm Galen (Galenika J Pharmacy)*. 2019;5(1):84–92.
 - 65. Shargel L, Wu-pong S YA. Applied Biopharmaceutics and Pharmacokinetics. Fifth Ed. Current Pharmaceutical Design. New York: McGraw-Hill Companies;
 - 66. Susanti M dan dachriyanus. Kromatografi Cair Kinerja Tinggi. 2017.
 - 67. R Malviya, V Bansal, OP Pal PS. High performance liquid chromatography: a short review. *J Glob pharma Technol*. 2010;
 - 68. Harmita. Analisis Fisikokimia Kromatografi. Jakarta: EGC; 2009.
 - 69. Dedhiya PP, Chauhan RS, Shah SA, Tailor PM. Determination of fenofibric acid (Related substance) in marketed formulations of fenofibrate by RP-HPLC. *J Pharm Sci Res*. 2014;6(10):313–20.
 - 70. Abdassah M. Nanopartikel dengan Gelasi Ionik. 2017;15.
 - 71. Sari YN, Zaini E, Ismed F. Peningkatan Laju Disolusi Piperin dengan Pembentukan Multikomponen Kristal Menggunakan Asam Nikotinat. *J Sains Farm Klin*. 2019;6(2):180-5
 - 72. Asyarie S, Wikarsa S, Farmasetika KK, Farmasi S. Pembuatan dan Karakterisasi Dispersi Padat Sistem Biner dan Terner dari Glikazid. *Acta Pharm Indones*. 2012;37(3):95-101

73. Variankaval N, mcNevin m, Shultz S, Trzaska S. high-Throughput Screening to Enable Salt and polymorph screening, Chemical Purification, and Chiral Resolution. Vol. 9, Comprehensive Organic synthetics: Second Edition. Elsevier Ltd. 2014.207-233
74. Snyder, l. R, Kirkland, J. J., & Glajch, J. L. Practical HPLC method development. John wiley & Sons
75. Rohman A. Validasi dan Penjaminan Mutu Metode Analisis Kimia. Yogyakarta : Gadjah mada
76. Qiao, N., Li, M., Schlindwein, W., Malek, N., Davies, A., & Trappitt, G. Pharmaceutical Cocrystal : An Overview. International Journal of Pharmaceutical. 2011, 419(1-2), 1-11
77. McNamara, D. P., Childs, S. L., Giordano, J., Iarricchio, A., Cassidy, J., Shet, M.S., & Park, A. Use of a Glutaric Acid Cocrystal to Improve Oral Bioavailability of a Low Solubility API. Pharmaceutical Research. 2006. 23(8), 1888-1897
78. Mirza RM, Ahirrao Sp, Kshirsagar SJ. a Nanocrystal Technology : To Enhance Solubility of Poorly Water Soluble Drugs. J Appl Pharm Res. 2017;5(2348):1-13