

DAFTAR PUSTAKA

1. Madhavi BB, Nath a ravinder, Banji D, Madhu m naga, Ramalingam R, Swetha D. Extraction, Identification, Formulation and Evaluation of Piperin in Alginate Beads. *Int J Pharm Pharm Sci.* 2009;1(2):156–61.
2. Jens Rohlof. Risk assessment of “other substances” – Piperine. Norwegian Scientific Committee for Food Safety (VKM); 2016.
3. Meghwal M and TKG. REVIEW Piper nigrum and Piperine: An Update. *Phyther Res.* 2013;27:1121–30.
4. Epstein WW. Isolation of Piperine from Black Pepper. *J Chem Educ.* 1993;7(7):598–9.
5. Ezawa T, Inoue Y, Tunvichien S, Suzuki R, Kanamoto I. Research Article : Changes in the Physicochemical Properties of Piperine/?-Cyclodextrin due to the Formation of Inclusion Complexes. *Int J Med Chem.* 2016;1–9.
6. Saha KC, Seal h p, Noor ma a. Isolation and characterization of piperine from the fruits of black pepper (*Piper nigrum*). *J Bangladesh Agric Univ.* 2013;11(1):11–6.
7. Ashour EA, Majumdar S, Alsheteli A, Alshehri S, Alsulays B, Feng X, et al. Hot Melt Extrusion as an approach to Improve Solubility, Permeability Oral Absorbion Of A Psychoactive Natural Product, Piperine. *J Pharm Pharmacol.* 2016;1–10.
8. K Vasavirama M upender. Piperine : a valuable alkaloid from piper species. *Int J Pharm Pharm Sci.* 2014;6(4):34–8.
9. P WYPA. Review : Teknik Peningkatan Kelarutan Obat. *Farmaka.* 2014;14(2):288–97.
10. Zaini E, Novita R, Salman, Kurniati I. Karakterisasi Fisikokimia dan Laju Disolusi Dispersi Padat Ibuprofen dengan Pembawa Polietilenglikol 6000. *J Ilm Farm UII.* 2010;4(1):25–31.
11. Zaini E, Halim A, Soewandhi sundani n, Setyawan D. Peningkatan Laju Pelarutan Trimetoprim Melalui Metode Kokristalisasi dengan Nikotinamida. *J Farm Indones.* 2011;5:205–12.

12. Cadha R. Cocrystal of Efavirenz with Selected Cofomers: Preparation and Characterization. *Int J Pharm Pharm Sci*. 2012;4(2):244–50.
13. Thenmozhi K. Enhanced Solubility of Piperine using Hydrophilic carrier based Potent Solid Dispersion Systems. *Drug Dev Ind Pharm*. 2017;
14. Shao B, Cui C, Ji H, Tang J, Wang Z, Liu H, et al. Enhanced oral bioavailability of piperine by self-emulsifying drug delivery systems: in vitro, in vivo and in situ intestinal permeability studies. *Drug Deliv*. 2014;22(6):740–7.
15. Mitra T, Sailakshmi G, Gnanamani A, Mandal AB. Preparation and characterization of malonic acid cross-linked chitosan and collagen 3D scaffolds: an approach on non-covalent interactions. *J Mater Sci Med*. 2012;23(5):1309–1321.
16. Pubchem. Tromethamine [Internet]. 2018. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/tromethamine#section=Top>
17. Pubchem. Piperine [Internet]. 2018. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/piperine#section=2D-Structure>
18. Drug future. Piperine [Internet]. 2018. Available from: <https://www.drugfuture.com/chemdata/piperine.html>
19. Gorgani L, Mohammadi M, Najafpour GD, Nikzad M. Piperine—The Bioactive Compound of Black Pepper: From Isolation to Medicinal Formulations. *institute food Technol*. 2017;16.
20. Pubchem. Malonic Acid [Internet]. 2018. Available from: https://pubchem.ncbi.nlm.nih.gov/compound/malonic_acid#section=Top
21. Chemical book. Malonic Acid [Internet]. 2018. Available from: https://www.chemicalbook.com/ChemicalProductProperty_EN_CB9709256.htm
22. Zaini E, Sumirtapura Y, Soewandhi sundani n, Halim A. Identifikasi interaksi fisika antara trimetoprim dan sulfametoksazol dengan metode kontak kofler dan reaksi kristalisasi. *Maj Farm Indones*. 2010;21(1):31–7.
23. Davis RE. Studies of phase relationships in cocrystal systems. *ACA*

- Transition; 2004. 41-61 p.
24. Qiao N, Li M, Schlinwein W, Malek N, Davies A, Trappitt G. Pharmaceutical cocrystals: An overview. *Int J Pharm.* 2011;419:1–11.
 25. Dewi R, Krisman, Khaironiati, Fauziana. Karakterisasi Mikrostruktur Material Feroelektrik Ba_{0.8}Sr_{0.2}TiO₃ (BST) dengan Variasi Suhu Annealing. *J Fis Indones.* 2014;XVIII(53):70–2.
 26. Vinod KR, Santhosha D, Anbazhagan S. Formulation and Evaluation of Piperine Cream - A New Herbal Dimensional Approach for Vitiligo Patients. 2011;3.
 27. Gozali D, Bahti HH, Soewandhi SN, Abdassah M. Pembentukan Kokristal Antara Kalsium Atorvastatin dengan Isonikotinamid dan Karakterisasinya. *J Sains Mater Indones.* 2012;15(2):103–10.
 28. R DSP, Junise V, Shibin P, Senthila S, Rajesh RS. Isolation , identification and antimycobacterial evaluation of piperine from *Piper longum*. 2012;4(3):863–8.
 29. Erlianti R, Darusman F, Herawati D. Praperlakuan Bahan Baku Glimepirid Melalui Metode Kokristalisasi Untuk Meningkatkan Kelarutan dan Laju Disolusi. *Pros Penelit sivitas Akad unisba (kesehatan dana Farm.* 2015;671–80.
 30. Rao VM. Chapter 1 - Solubility of Pharmaceutical Solids. *Dev solid oral dosage form* [Internet]. 2009; Available from: <https://doi.org/10.1016/B978-0-444-53242-8.00001-1>
 31. Abdou HM. Dissolution, Bioavailability, and Bioequivalence. In *Pennsylvania: Mark Publishing Company Easton.*; 1989.
 32. Departemen Kesehatan Republik Indonesia. *Farmakope Indonesia edisi 4.* 1995.
 33. Ardianingsih R. Penggunaan High Performance Liquid Chromatography (HPLC) Dalam Proses Analisa Deteksi Ion. *Ber Dirgant.* 2009;10(4):101–4.
 34. M khopkar S. konsep dasar kimia analitik. Jakarta : UI Press; 1990.
 35. Zaini E, Witarsah AS, Agustin R. Enhancement of dissolution rate of Meloxicam by co-grinding technique using Hydroxypropyl

- methylcellulose. *J Chem Pharm Res.* 2014;6(11):263–7.
36. Cadha R. Cocrystals of telmisartan: characterization, structure elucidation, in vivo and toxicity studies. *R Soc Chem.* 2014;16:8379–89.
37. Alatas F, Ratih H, Soewandhi SN. Enhancement of Solubility and Dissolution Rate of Telmisartan by Telmisartan-Oxalic Acid Co-Crystal Formation. *Int J Pharm Pharm Sci.* 2015;7(3):423–6.
38. Rathod SS, Rathod VK. Extraction of piperine from Piper longum using ultrasound. *Ind Crop Prod [Internet]. Elsevier B.V.;* 2014;58:259–64. Available from: <http://dx.doi.org/10.1016/j.indcrop.2014.03.040>
39. Saraf S. TLC Densitometric Method for the Estimation of Piperine in Ayurvedic Formulation Trikatu Churna. 2011;27(1):1–4.
40. FMIPAUI. X-Ray Difraksi (XRD) [Internet]. Universitas Indonesia. 2019. Available from: <https://labrisetfmipauui.wordpress.com/x-ray-difraksi-xrd/>
41. Direktori File UPI. Analisis Termal. :67–81. Available from: http://file.upi.edu/Direktori/FPMIPA/JUR._PEND._KIMIA/196808031992031-AGUS_SETIABUDI/Bahan_Kuliah_Karakterisasi_Material/Bab_7_Analisa_Termal.pdf
42. Mohan R, Lorenz H, Myerson AS. Solubility Measurement Using Differential Scanning Calorimetry. 2002;4854–62.
43. Dachriyanus PD. Analisis Struktur Senyawa Organik Secara Spektroskopi. 2004.
44. Arikalang TG, Sudewi S, Rorong JA. Penentuan Kandungan Total Fenolik pada Ekstrak Daun Gedi Hijau (*Abelmoschus manihot* L .) yang Diukur dengan Spektrofotometer UV-Vis. 2018;7(3).
45. Susanti M, Dachriyanus PD. Kromatografi Cair Kinerja Tinggi.
46. UI DFF. Petunjuk Pelaksanaan Validasi. 2004;I(3):117–35.
47. Lieberman H, Vemuri NM. Chemical and Physicochemical Approaches to Solve Formulation Problems [Internet]. *The Practice of Medicinal Chemistry.* Elsevier Ltd; 2015. 767-792 p. Available from: <http://dx.doi.org/10.1016/B978-0-12-417205-0.00032-8>

48. Pandya P, Gattani S, Jain P, Khirwal L, Surana S. Co-solvent Evaporation Method for Enhancement of Solubility and Dissolution Rate of Poorly Aqueous Soluble Drug Simvastatin: In vitro – In vivo Evaluation. 2008;9(4).
49. Ezawa T, Inoue Y, Murata I, Takao K, Sugita Y, Kanamoto I. Characterization of the Dissolution Behavior of Piperine / Cyclodextrins Inclusion Complexes. AAPS PharmSciTech; 2017;

