

DAFTAR PUSTAKA

- A'yunin, Q. 2017. *Pengaruh perbedaan jenis kosurfaktan (Poloxamer 188, Lesitin, Propilen glikol) terhadap karakteristik SLN-CoQ₁₀*. Surabaya: Departemen Farmasetika Fakultas Farmasi Universitas Airlangga.
- Agar, N.S., Halliday G.M., Barnetson, Ross StC., Ananthaswamy H.N., Wheeler, M.,and Jones, A.M. 2004.The Basal Layer In Human Squamous Tumors Harbors More UVA Than UVB Fingerprint Mutations: A Role ForUVA In Human Skin Carcinogenesis.*PNAS*, vol. 101 no. 14
- Allen, Jr. L. V., Popovich, N. G., Ansel, H. C., 2009. *Ansel's Pharmaceutical Dosage Forms and Drug Delivery System, 9thEd.*Philadelphia : Lippinett Williams & Wilkins, a Wolters Kluwe Bussiness.
- Annisa, R., Hendradi, E., dan Melani, D. 2016. Pengembangan Sistem Nanostructured Lipid Carriers (NLC) Meloxicam Dengan Lipid Monostearin Dan Miglyol 808 Menggunakan Metode Emulsifikasi. *J.Trop. Pharm. Chem.*, Vol 3 No. 3, p. 156-169.
- Ardhie, A. M. 2011. Radikal Bebas dan Peran Antioksidan dalam Mencegah Penuaan. *Medicinus* 24(1): 3-9.
- Arikunto, Suharsimi. 2009. *Manajemen Penelitian*. Jakarta : PT. Rineka Cipta
- Asmara, A., Daili, S.F., Noegrohowati, T., Zubaedah, I. 2012. Vehikulum Dalam Dermatoterapi Topikal.*MDVI*,Vol.39. No.1: 25-35
- Barile, F. A., 2013. *Principles of Toxicology Testing. 2nd Ed.* Boca Raton: CRC Press.
- Benting, M., Kerstin B., and Gustav D . 2007.The antioxidant role of coenzyme Q. *Mitochondrion*, 7S S41–S50

- Bose S, Du Y, Takhistov P, Michniak-Kohn B. 2013. Formulation optimization and topical delivery of quercetin from solid lipid based nanosystems. *International Journal of Pharmaceutics* 441: 56-66.
- Bule, M.V., Singhal R.S., Kennedy J.F. 2010. Microencapsulation of Ubiquinone-10 in Carbohydrate Matrices for Improved Stability. *Carbohydrate Polymers* 2010; 82: 1290–1296
- Chen, H., Chang, X., Du, D., Liu, W., Liu, J., Weng, T., Yang, Y., Xu, H., Yang, X. (2006). Podophyllotoxin-Loaded Solid Lipid Nanoparticles For Epidermal Targeting. *J Control Release* 110(2): 296-306.
- Cordero M.D., Alcocer-Gomez E., Culic O. 2014. NLRP3 inflammasome is activated in fibromyalgia: the effect of coenzyme Q10. *Antioxid Redox Signal*, Vol. 20(8):1169-1180.
- Depkes RI. 1995. *Farmakope Indonesia Edisi IV*. Jakarta: Departemen Kesehatan RI.
- Dubey, A., Prabhu, P., and Kamath, J.V. 2012. Nano Structured lipid carriers :A Novel Topical drug delivery system. *International Journal of Pharm Tech Research*, Vol.4, No.2, pp 705-714.
- Dummer, R., Rinderknecht, J., Goldinger, S.M. 2012. Ultraviolet A and Photosensitivity during Vemurafenib Therapy. *The New England Journal of Medicine*, 366;5
- Ekambaram P., Shatali A. A. H., Priyanka K., 2011, Solid LipidNanoparticle: A Review. *Scientific Review and ChemicalCommunication*, Vol. 2, p. 80-102
- Gao, X.H., Zhang, L., Wei, H., Chen, H.D. 2008. Efficacy and safety of innovative cosmeceuticals. *Clinics in Dermatology*, 26: 367–374
- Gupta, S., Kesarla, R., Chotai, N., Misra, A., and Omri, A. 2017. Systematic Approach for the Formulation and Optimization of Solid Lipid

Nanoparticles of Efavirenz by High Pressure Homogenization Using Design of Experiments for Brain Targeting and Enhanced Bioavailability. *Hindawi BioMed Research International*, Volume 2017: Article ID 5984014

Hou, D., C. Xie, K. Huang, C. Zhu. 2003. The Production and Characteristics of Solid Lipid Nanoparticles (SLNs). *Biomaterials* 24: 1781–1785.

Isfardyana, S.H., Safitri, S.R. 2014. Pentingnya Melindungi Kulit dari Sinar Ultraviolet dan Cara Melindungi Kulit dengan Sunblock Buatan Sendiri. *Jurnal Inovasi dan Kewirausahaan*, Vol. 3, No. 2

Jee, J.P., Lim, S.J., Park, J.S., Kim, C.K. 2005. Stabilization of All-Trans Retinol by Loading Lipophilic Antioxidants in Solid Lipid Nanoparticles. *European Journal of Pharmaceutics and Biopharmaceutics*, 63: 134–139.

Jenning V, Thünemann AF, Gohla SH. Characterisation Of A Novel Solid Lipid Nanoparticle Carrier System Based On Binary Mixtures Of Liquid And Solid Lipids. *Int J Pharm.*, 2000: 199: 167-77.

Kamble, Meghana, S., Vaidya, K. K., Bhosale, A.V., Chaudhari, P.D., 2012. Solid Lipid Nanoparticles and Nanostructured Lipid Carriers –an Overview. *International Journal of Pharmaceutical, Chemical and Biological Sciences*, 2(4), p.681-691

Karn-orachai, K., Smith, S.M., Phunpee, S., Treethong, A., Puttipipatkhachorn, S., Pratontep, S., and Ruktanonchai, U.R. 2014. The effect of surfactant composition on the chemical and structural properties of nanostructured lipid carriers. *J Microencapsul, Early Online*, p. 1–10.

Kejlova, K., Jirova, D., Bendova, H., Kandarova, H., Weidenhoffer, Z., Kolarova, H., Liebsch, M. 2007. Phototoxicity of Bergamot Oil Assessed by In Vitro Techniques in Combination with Human Patch Tests. *Toxicology in Vitro*. Vol 21 : 1298–1303

- Keogh, A., Fenton, S., Leslie, C., Aboyoun, C., Macdonald, P., Zhao, Y.C., Bailey, M., and Rosenfeldt, F. 2003. Randomised Double-Blind, Placebo-Controlled Trial of Coenzyme Q10 Therapy in Class II and III Systolic Heart Failure. *Heart, Lung and Circulation*, vol. 12
- Khalil, R.M., Ahmed Abd El-Bary., Kassem, M.A., Ghorab, M.M., Ahmed, M.B. 2013. Solid Lipid Nanoparticles For Topical Delivery Of Meloxicam: Development And In Vitro Characterization. *Portugal : 1st Annual International Interdisciplinary Conference, AIIC.*
- Khan Shagufta. 2012. *Solid Lipid Nanoparticles: A Review*. **World Journal of Pharmacy and Pharmaceutical Science**, Vol. 1, No. 1, p. 96-115.
- Kovacevic, A., S. Savia, G. Vuleta, R. H. Muller, C. M. Keck. 2011. Polyhydroxy Surfactants For The Formulation Of Lipid Nanoparticles (SLN and NLC): Effects on Size, Physical Stability and Particle Matrix Structure. *International Journal of Pharmaceutics*, 406: 163-172.
- Kura, A.U., Hasan, S., Hussein-Al-Ali, Hussein, M.Z., and Fakurazi1, S. 2014. Preparation of Tween 80-Zn/Al-Levodopa-Layered Double Hydroxides Nanocomposite for Drug Delivery System. *The Scientific World Journal*, Volume 2014: Article ID 104246
- Lason, E., Ogonowski, J. 2011. SLN – Characteristic, Application and Obtaining 45 Years of FCE and T of Cracow University of Technology. *Chemicz* 65(10), 960-967
- Littarru, G.P., and Tiano L. 2007. Bioenergetic and Antioxidant Properties of Coenzyme Q10: Recent Developments. *Mol Biotechnol*, 37:31–37.
- Loo, C. H., M. Basri, R. Ismail, H. Lau, B. Tejo, M. Kanthimathi, H. Hassan, Y. M. Choo. 2012. Effect of compositions in nanostructured lipid carriers (NLC) on skin hydration and occlusion. *Int J Nanomedicine* 8: 13–22.

- Maia, C.S., Mehnert, W., M. Scha "fer-Korting, 2000. Solid lipid nanoparticles as drug carriers for topical glucocorticoids. *International Journal of Pharmaceutics* 196 (2000) 165–167
- Martins, S., Costa-Lima, S., Carneiro, T., Cordeiro-da-Silva, A., Souto, E.B., Ferreira, D.C. 2012. Solid lipid nanoparticles as intracellular drug transporters: An investigation of the uptake mechanism and pathway. *International Journal of Pharmaceutics*, 2012; 430: 216–227
- Masaki, H. 2010. Role of antioxidants in the skin: Anti-aging effects. *J.Derm. Sci.* 58:85–90.
- Mayangsari, F.D. 2015 . *Uji Iritasi Kulit Sln Apms Berbasis Lipid Sistem Biner (Beeswax: Gliseril Monostearat= 50: 50) Pada Kelinci Albino Jantan*. Surabaya: Departemen Farmasetika Fakultas Farmasi Universitas Airlangga.
- Mehnert W, Mäder K., Solid Lipid Nanoparticles: Production, Characterizationand Applications. *Adv Drug Deliv Rev*. 2001; 47: 165-96.
- Mei Z., Wu Q., Hu S., Li X., and Yang X. 2003. Triptolide loaded solid lipid nanoparticle hydrogel for topical application. *Drug Development and Industrial Pharmacy*, vol. 31,no. 2, pp. 161–168
- Mortensen, S.A. 2003. Overview On Coenzyme Q10 As Adjunctive Therapy In Chronic Heart Failure. Rationale, Design And End-Points Of “Q-Symbio” – A Multinational Trial. *BioFactors*, 18 : 79–89. Denmark: IOS Press
- MSDS.2013. *Cetyl palmitate MSDS* (<http://www.sciencelab.com/msds.php?msdsId=9923365>)diakses pada 11 Januari 2018).
- MSDS. 2013. *MSDS CoQ10*. (<https://www.caymanchem.com/msdss/11506m.pdf>). Diakses pada tanggal 11 Januari 2018

MSDS. 2013. Poloxamer 188 MSDS

(<http://www.sciencelab.com/msds.php?msdsId=9926611> diakses pada 11 Januari 2018).

MSDS. 2013. Span 80 MSDS.

(<http://www.sciencelab.com/msds.php?msdsId=9927282> diakses pada 11 Januari 2018).

MSDS. 2013. Tween 80

MSDS. (<http://www.sciencelab.com/msds.php?msdsId=9926645> dia
kses pada 11 Januari 2018).

Mukherjee S, Ray S, Thakur RS. 2009. Solid lipid nanoparticles: A modern formulation approach in drug delivery system, *Indian J Pharm Sci*, 71(4): 58-349.

Müller RH, Mäder K, Gohla S. 2000. Solid Lipid Nanoparticles (SLN) for Controlled Drug Delivery. *European Journal of Pharmaceutics and Biopharmaceutics* 50: 161-177.

Müller RH, Radtke M., Wissing SA. 2002. Nanostructured lipid matrices for improved microencapsulation of drugs. *Int. J. Pharm.*, 242: 121- 128

Ndikubwimana, Jean de Dieu., and Lee, B.H. 2014. Enhanced production techniques, properties and uses of coenzyme Q10. *Biotechnol Lett*, 36:1917–1926

Nigam, P. K. 2009. Adverse reactions to cosmetics and methods of testing. *Indian J Dermatol Venereol Leprol*, Vol 75: Issue 1

Panther, D.J. and Jacob, S.E. 2015. The Importance of Acidification in Atopic Eczema: An Underexplored Avenue for Treatment. *J. Clin. Med.*, Vol.5, p.970-978.

Pardeike, J., Kay S., Rainer H. Muller. 2010. Influence of nanostructured lipid carriers (NLC) on the physical properties of the Cutanova

- Nanorepair Q10 Cream and the in vivo skin hydration effect. *International Journal of Pharmaceutics* 396: 166-173.
- Peshkovsky, A.S., Peshkovsky, S.L., and Bystryak, S. 2013. Scalable high-power ultrasonic technology for the production of translucent nanoemulsions. *Chemical Engineering and Processing*, 69 : 77–82
- Puspitasari, D.P. 2006. *Adsorpsi Surfaktan Anionik Pada Berbagai pH Menggunakan Karbon Aktif Termodifikasi Zink Klorida*. Bogor: Departemen Kimia Fakultas Matematika Dan Ilmu Pengetahuan Alam Institut Pertanian Bogor.
- Robinson, M. K. and Perkins, M. A. 2002. A Strategy for Skin Irritation Testing. *American Journal of Contact Dermatitis*, Vol 13, No 1: pp 21-29
- Roces, C.B., Kastner, E., Stone, P., Lowry D., and Perrie, Y. 2016. Rapid Quantification and Validation of Lipid Concentrations within Liposomes. *Pharmaceutics*, Vol. 8 No. 29; p. 1-11.
- Rowe, R. C., Sheskey, P. J., Quinn, M. E. 2009. *Handbook of Pharmaceuticals Excipients 6th edition*. London: Pharmaceuticals Press.
- Ruktanonchai, U., Limpakdee, S., Meejoo, S., Sakulkhu, U., Bunyaphraphatsara, N., Junyaprasert, V., and Puttipipatkhachorn, S. 2008. The effect of cetyl palmitate crystallinity on physical properties of gamma-oryzanol encapsulated in solid lipid nanoparticles. *Nanotechnology*, Vol. 19, p. 1-10.
- Saini, Rajiv. 2011. Coenzyme Q10: The essential nutrient. *Journal of Pharmacy and Bioallied Sciences*, Vol 3: Issue 3
- Selvamuthukumar, S., and Velmurugan, R. 2012. Nanostructured Lipid Carriers: A Potential Drug Carrier for Cancer Chemotherapy. *Lipids in Health and Disease*, Vol. 11, No. 159, p. 1-8.

- Setiyawan. 2003. *Uji Fototoksitas Ekstrak Metanol Rimpang Bengle (Zingiber cassumunar Roxb.) Terhadap Larva Artemia salina Leach.* Surabaya: Fakultas Farmasi Universitas Surabaya
- Shah, R., et al. 2015. Lipid Nanoparticles: Production, Characterization and Stability. *Springer Briefs in Pharmaceutical Science & DrugDevelopment*, p. 11-22.
- Shapiro, S. S., and Saliou, C. (2001). Role Of Vitamins In Skin Care. *Nutrition*, 17: 839–844.
- Singh-Joy, S.D., and McLain, V.C. 2008. Safety Assessment of Poloxamers 101, 105, 108, 122, 123,124, 181, 182, 183, 184, 185, 188, 212, 215, 217, 231, 234, 235, 237, 238, 282, 284, 288, 331, 333, 334, 335, 338, 401,402, 403, and 407, Poloxamer 105 Benzoate, andPoloxamer 182 Dibenoate as Used in Cosmetics. *International Journal of Toxicology*, 27: 93
- Singh U., Devaraj S., and Jialal I. 2007. Coenzyme Q10 Supplementation and Heart Failure. *Brief Critical Review*,(I): 286–293.
- Soerarti, Widji. 2007. *Membangun Keunggulan Akademik Farmasetika Melalui Pengembangan Cosmetic Delivery System.* Surabaya: Departemen Farmasetika Fakultas Farmasi Universitas Airlangga.
- Souto, E.B., and Muller, R.H., 2007. Lipid Nanoparticles (Solid lipid Nanoparticles and Nanostructured Lipid Carriers) for Cosmetic, Dermal, and Transdermal Applications. *Drug and Pharm Sci*, Vol. 166, p.213-232.
- Sukandar, E. Y.. 2004. *Tren Dan Paradigma Dunia FarmasiIndustri-Klinik Teknologi Kesehatan.* Bandung : Departemen Farmasi, FMIPA, Institut Teknologi Bandung.
- Tranggono, R.I., Latifah, F. 2007. *Buku Pegangan Ilmu Pengetahuan Kosmetik.* PT. Gramedia : Jakarta

- Uner, Melike., 2006. Preparation, Characterization and Physicochemical of Solid Lipid Nanoparticles (SLN) and Nanostructured Lipid Carriers (NLC): Their Benefits as Colloidal Drug Carrier Systems. Istanbul: Faculty of Pharmacy, *Pharmazie*, Vol. 61, p. 375-386.
- USP 32 – NF 27. 2009. *United States Pharmacopeia and The National Formulary*. Rockville (MD): The United States Pharmacopeial Convention.
- Villalba, J. M., Parrado, C., Santos-Gonzalez, M., Alcain, F. J. 2010. Therapeutic Use Of Coenzyme Q10 And Coenzyme Q10-Related Compounds And Formulations. *Expert Opin. Investig. Drugs* 19, 535–554.
- Wang, J., H. Wang, X. Zhou, Z. Tang, L. Guoqing, L. Guangyu, Q. Xia. 2011. Physicochemical Characterization, Photo-Stability, And Cytotoxicity Of Coenzyme Q10-loading NLC. *Journal of Nanoscience and Nanotechnology* 12, 2136-2148.
- Weiss, J., Decker, E.A., McClements, D.J., Kristbergsson, K., Helgason, T., and Awad, T. 2008. Solid Lipid Nanoparticles as Delivery Systems for Bioactive Food Components. *Food Biophysics*. 3:146–154
- Welsh, H. K. 1990. Final Report on the Safety Assessment of Octyl Palmitate, Cetyl Palmitate and Isopropyl Palmitate. *Journal of the American College of Toxicology*, 1:13
- WHO, 2002. *Bahaya Bahan Kimia pada Kesehatan Manusia dan Lingkungan*. Jakarta: Penerbit Buku Kedokteran EGC.
- WHO, 2009. *Safety Evaluation of Certain Food Addition*. s.l.: WHO Press.
- Wissing SA, Yener G, Muller RH. 2004. Influence Of Surfactants On The Physical Stability Of Solid Lipid Nanoparticle (SLN) Formulations. *International Journal of Pharmaceutical Sciences* 59: 331-332.
- Yanhendri, S.W.Y. 2012. Berbagai Bentuk Sediaan Topikal dalam Dermatologi. *CDK-194*, vol. 39 no. 6, th. 2012

- Yu, H. 2007. Environmental Carcinogenic Polycyclic Aromatic Hydrocarbons: Photochemistry And Phototoxicity. *Journal of Environmental Science and Health, Part C: Environmental Carcinogenesis and Ecotoxicology*, 20:2, 149-183.
- Zauner W, Farrow NA, Haines AM., *In Vitro* Uptake Of Polystyrene Microspheres: Effect Of Particle Size Cell Line And Cell Density, *J. Control Release*. 2001; 71: 39-51.