

Specification : Tranexamic Acid (TA) Loaded Nanovesicular Dispersion/

สารแขวนตะกอนทราเนซามิคแอซิด (ทีเอ) เก็บกักในอนุภาคนาโน

(Manose RM-0062)

(Application : An active ingredient for whitening cosmetics/

สารสำคัญในผลิตภัณฑ์เครื่องสำอางช่วยให้ผิวขาว)

1. Name of the raw material : Tranexamic Acid (TA) Loaded Nanovesicular Dispersion
2. Active components : Trans - 4 - (aminomethyl) cyclohexane carboxylic acid and polyoxyethylene sorbitan monolaurate (tranexamic acid mixed with Tween 20)
3. Common and scientific name/ Family of the plant : -
4. Physical appearance : White turbid dispersion with specific light odor
5. pH : 7.24
6. Standardization : Using pure compound of tranexamic acid
7. Solubility : Dispersable in water
8. Microbial contamination : No pathogenic microorganism with less than 1,000 cfu/g of the total plate count of bacteria, yeast and fungi which is conformed to the Thai FDA regulation
9. Biological activities : Whitening effect by melanogenesis inhibition⁽¹⁾
10. Animal / human performance test : Skin whitening in human volunteers⁽²⁾
11. Safety : No skin irritation in human volunteers
12. Pharmaceutical, food supplement or cosmetic applications : Whitening cosmetics

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13. Recommended : 5 % w/w
concentrations in the
product
14. Storage : 12 months from manufacturing date when kept in dry
and cool place protected from light
15. Precautions : None
16. Cost per kg : Please request

References

1. Cho YH, Park JE, Lim DS, Lee JS. (2017) Tranexamic acid inhibits melanogenesis by activating the autophagy system in cultured melanoma cells. **Journal of Dermatological Science**. 88(1): 96-102
2. Ebrahimi B, Naeini FF. (2014) Topical tranexamic acid as a promising treatment for melasma. **Journal of Research in Medical Science**. 19(8): 753-757
3. Manosroi A, K Podjanasoonthon, Manosroi J. (2002) Development of novel topical tranexamic acid liposome formulations. **International Journal of Pharmaceutics**. 20 ; 235(1-2): 61-70 (Corresponding author and co-authors are from Manose Health and Beauty Research Center)
4. Manosroi A, K Podjanasoonthon, Manosroi J. (2002) Stability and release of topical tranexamic acid liposome formulations. **Journal of Cosmetic Science**. 53(6): 375-86 (Corresponding author and co-authors are from Manose Health and Beauty Research Center)
5. Kanechorn Na Ayuthaya P, Niumphradit N, Manosroi A, Nakakes A. (2012) Topical 5% tranexamic acid for the treatment of melasma in Asians : A double-blind randomized controlled clinical trial. **Journal of Cosmetic and Laser Therapy**. 14(3): 150-154 (Corresponding author and co-authors are from Manose Health and Beauty Research Center)