## **ABSTRACT**

## SKIN IRRITATION TEST OF PMCA-SLN LIPID BINARY SYSTEM (BEESWAX:GLYCERYL MONOSTEARAT =50:50) ON MALE ALBINO RABBIT

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This study aims at comparing the skin irritation caused by PMCA on SLN (beeswax:glyceryl monostearate = 50:50) binary system and simple cream binary system. The evaluation of the potential irritation was carried out by the Draize patch test on albino rabbits. The compositions of SLN and simple cream are p-methoxycinnamic acid 0.87%, tween 80.10%, propylene glycol 20%, and acetate buffer pH  $4.2 \pm 0.2$ . PMCA-SLN was produced by high shear homogenization method and stirred at 24000 rpm for 8 minutes. While the APMS-simple cream was made by using manual technique. The skin irritation was examined based on the observation on visual change of the skin, such as erythema and edema. Based on the observation, it can be concluded that the skin irritation caused by PMCA on SLN binary system is smaller than the one caused by simple cream binary system. However, both of them are still in the same irritation category.

Keywords: Para methoxy cinnamic acid, Solid Lipid Nanoparticles (SLN), skin irritation, Draize Patch Test.