

The Effect of Backing Layer on Adhesion Properties of Single Layer Ketoprofen Transdermal Drug Delivery System

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Abstract : The transdermal drug delivery system is one of the types of novel drug delivery system that the drug is absorbed into the skin. The major considerations for designing and producing transdermal patch are small size, suitable drug release and good adhering. In this study, drug-in-adhesive transdermal patch contained non-steroidal anti-inflammatory ketoprofen is prepared. Also, the effect of non-woven fabric and plastic backing layers on adhesion properties is assessed. The results of the test, demonstrated the use of plastic backing layer increases tack and peel rather than non-woven fabric type. The balance tack with plastic backing layer patch is 6.7 (N/mm²), and the fabric one is 3.8 (N/mm²), and their peel is 9.2 (N/25mm) and 8.3 (N/25mm) by arrangement.

Keywords : transdermal drug delivery system, single layer patch of ketoprofen, plastic layer, fabric backing layer

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