ABSTRACT

INFLUENCE of pH UPON SOLUBILITY of SALICYLAMIDE

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The influence of pH upon solubility of salicylamide, a weak acid which has analgesic and antipyretic activity, as a preformulation study of physico chemical properties before its further development as pharmaceutical dosage form has been investigated. Solubility of drug could affect its absorption in the gastrointestinal tract and also during penetration of drugs through the stratum corneum. As a weak acid, salicylamide solubility is thoroughly influenced by pH. To determine the solubility of salicylamide, saturated solubility of salicylamide were performed. Determination solubility of salicylamide was performed at pH ranges of 2.0 – 11.0. The result suggest that an increase of pH from 2.0 to 10.0 would also increase salicylamide solubility, but at pH 11.0 salicylamide solubility were declined as shown in the profile. The decrease of salicylamide solubility in pH 11.0 caused by specific base catalysis. Therefore, it is strongly suggested to investigate the influence of pH upon salicylamide stability.

Keyword : pH of Salicylamide, Solubility