P1. THE ONE MINUTE TEST TO DISCRIMINATE BETWEEN A DILUTED AND AN ABSOLUTE ETHYL ALCOHOL WITH DEMONSTRATION

Prasert Songkittiguna

Department of Pharmacology, Faculty of Dentistry, Chulalongkorn University, Bangkok , Thailand.

ABSTRACT

A piece of a projector physiograph recording film (2 x 10 cm) was made to become a circle (2.5-cm diameter) by hand. One end of the film was fixed on a hard paper, whereas the other end of the film was glued perpendicularly with a red pointer (0.2 x 2 cm) made from a small piece of the film. The unknown alcohol sample (0.5 ml) having previously soaked to a medical grade cotton on a piece of wood stick. Then it was positioned at the center point between the film space. No film contact was allowed. The counter-clockwise turning of the film pointer, the unknown sample was diluted ethyl alcohol; while the opposite direction (anti-clockwise), the absolute ethyl alcohol was indicated. These phenomena might be due to the difference in the specific gravity in air of the diluted and the absolute ethyl alcohol (the diluted ethyl alcohol is 0.9289 at 25 °C, and the absolute ethyl alcohol is 0.7871 at 25 °C). It may be concluded, therefore, that a quick identification of the diluted and the absolute ethyl alcohol is made possible by the use of the projector physiographic film and this can be done on spot by the user. A projector physiograph recording film (250 ft roll) accompanying a physiograph, PMP-44 E&M Instrument Company, Inc. Houstion , Texas, U.S.A. Alcoholometric table in Thai Pharmacopoeia, Volume 1, 1987 pp.417-419. Published with the co-operation of the Drug Committee and the Food and Drug Administration of Thailand by Department of Medical Sciences, Ministry of Public Health Bangkok 10100, Thailand. The test should be performed in a controlled room temperature of 25°-26°C.