PHARMACE UTICAL ORGANIC CHEMISTRY-II- BP301T

UNIT: 3 Fats and Oils

CLASS: 9

TOPIC: Reichert-Meissel Value

Reichert-Meissel Value:

It is defined as the number of milli liters of potassium hydroxide required to neutralize the water soluble steam of 5 grams of hydrolyzed fat or oil.

Procedure:

To the 10 grams of sample add an excess of 0.1 N NaOH solutions in order to completely saponify the fat.

The solution is then acidified with dilute sulphuric acid and it undergoes steam distillation method.

The distillate containing the volatile acids is then titrated with 0.1 N KOH solution using phenolphthalein as an indicator.

$$R\ M\ Value = 1.10\ X\ T_1 - T_2$$

T_1 = Volume of 0.1 N KOH used for titration

T_2 = Volume of 0.1 N KOH used for blank titration

Significance:

RM Value is useful for testing the purity of the butter and ghee which may contain high amount of glycerides of butyric acid and other steam volatile fatty acid residue.

Ex: Adulterated of butter has low RM Value than that of pure butter

It also helps in determining the purity of the ghee and butter.