11.11 Determination of free fatty acids

The free fatty acids (FFA) content of sunflower acid oil was determined as per the method of AOAC (1995). Accurately 7.05 g of well mixed oil was weighed into a 250 ml flask, to this was added 50 ml of alcohol which was neutralized previously by adding 2 ml phenolpthalein solution and enough 0.1 N NaOH to produce faint permanent pink. The contents were titrated with 0.25 N NaOH with vigorous shaking until permanent pink color appears and persists for more than one minute. Titre value itself corresponds to the per cent FFA expressed as per cent oleic acid.

Reference: AOAC method 940.28, 16th edition.