

## Summary:

Lipid plays a major role in foods. In addition to their nutritional importance lipids are also used in foods because of their characteristic physicochemical properties. In order to make changes in lipid composition while ensuring the production of high quality foods, a fundamental understanding of the chemical and physical properties of lipids is critical. It is important to know analytical techniques that can be used to characterize the physicochemical properties of lipids. The methods that are used for the analysis of physical properties are melting point, softening point, specific gravity, refractive index, smoke, flash and fire point, turbidity point. Analysis of chemical properties includes, reichert meissel value, polenske value, iodine value, peroxide value and saponification value. Melting point is determined by open-tube capillary-slip, while softening point by closed-tube capillary-slip method. Specific gravity is measured using pycnometer and the specific gravity of the fats is less than 1. Refractive index varies with temperature and wavelength and is estimated using butyro refractrometer. The smoke, flash and fire points of a fatty material are standard measures of its thermal stability when heated in contact with air. Reichert-Meissl helps to estimate volatile water-soluble fatty acids, while Polenske value estimates volatile water insoluble fatty acids. Peroxide value helps in determination of oxidation of lipids. Saponification value and iodine value, have been useful screening tests for quality control and for characterizing types of fats and oils.