ABSTRACTS

David Wesson, *Abstract Editor*

Pure glycerol containing 0.005 percent ash and 0.008 percent sulfuric acid was heated in a glass flask at 120-125° in the presence of various metals. Aluminum and copper have the smallest, and iron and lead the greatest effect on the quality. The glycerol was greatly improved by filtration through paper and charcoal. *Masloboino Zhirov. Delo* 1928, No. 4, 13-4

The percentage of neutral oil in a sulfonated oil can be determined by the saponification number of the sulfonated oil provided the saponification number of the original oil is known. An alcoholic solution of the sulfonated oil must first be neutralized to phenolphthalein. Satisfactory agreement has been secured through this method with the usual separation method for neutral oil. *J. Am. Leather Chem. Assoc.* 24, 120-1 (1929)

Fats of high vitamin-A content are said to be capable of extraction from viscera and like material by freezing and pulverizing the material, thawing and treating with caustic soda or other suitable alkaline solution, heating to about 40°, mixing, allowing to stand; then separating the fat after the protein has dissolved. Brit. Pat. No. 293,777.

Sulfonation of castor oil or other fatty materials or derivatives may be effected by the use of sulfuric acid together with a dehydrating agent such as oxides, chlorides, oxychloride or acids of phosphorous. Chlorosulfonic acid also may be used and the reaction products may be rendered less viscous by the use of acetic acid or acetic anhydride. Brit. Pat. No. 293,690.

Because cold-made coconut oil soaps are said to contain about fifteen percent of unsaponified oil, it is claimed that this might explain the tendency toward rancidity that they possess. This unsaponified portion consists of 83% diglyceride and 17% monoglyceride of lauric and oleic acids. The free fatty acids present in the unsaponified oil consist of a low molecular mixture of capronic and caprylic acids. The unsaponified glycerides do not contain these acids, which have a peculiar odor and the faculty of rapid oxidation. *Am. Perfumer* 23,772-4; 24,61-2 (1929)

The emulsion forming capacity of fats may be measured by means of a "capillary electrode," as follows: two copper plates are kept apart by two pieces of glass of about 0.2 mm. thickness within a rubber band around the whole. The breaking of an emulsion is indicated by the glowing of an electric lamp of 50 candlepower with alternating current of 120 volts and 50 cycles passing through these electrodes and through the emulsion at 40-45°C. The emulsion forming capacities of various fats may be thus shown by different stabilities of emulsions.

A new saponifier and emulsifier for fats is prepared by sulfonation of the thick black vaseline-like residue of non-decomposed fats remaining after the distillation of stearic acid. It is said that this saponifier produces fatty acids somewhat darker than those obtained in the Twitchell process, but that the glycerine is lighter. *J. Chem Ind.* (Moscow) 5. 1176-81 (1928)

The Iodine value (Hanus) of tung oil has been found to rise markedly with increasing time of reaction from ¼ hour to 2 hours, and afterwards to remain steady at 230-240, corresponding to saturation of the three double linkages of the oleostearic acid present. Since with other vegetable oils a constant Iodine value is obtained after ¼ hour it has been suggested that the presence of tung oil in linseed oil might be recognized quantitatively by observation of an Iodine value increasing with the time of reaction. *Farben-Ztg.* 33.-2480-4 (1928)

Wood oil in carbon disulfide solution has been polymerized at room temperature by standing overnight with one percent of a 5 percent solution of anhydrous stannic chloride in carbon disulfide. A yield of 56 percent of an acetone-insoluble gel was obtained. The method is said to be applicable to linseed oil and to cod liver oil. *Chem. Umschau Fette, Oele, Wachse Harze* 36, 58-9 (1929)