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Speakman Carbons)Commercial Powdered Activated Carbon Products; Powdered Activated Carbon in Processing Edible Oils; Commercial Powdered Activated Carbon Companies; Activated Earth/Carbon Mixtures; Amorphous Silica Hydrogel; Commercial Amorphous Silica-Hydrogel Products; Specialty Products That Act Like Amorphous Silica Hydrogel; Chapter 4. Bleaching of Important Fats and Oils; General Principles; Lard; Beef Tallow; Butterfat; Coconut Oil; Cottonseed Oil; Grapeseed Oil; Groundnut (Arachis, Peanut) Oil; Illipe Oil, Borneo Tallow, and Other Vegetable Butters; Linseed Oil (Flax)
Corn Oil (Maize)Olive Oil; Palm Oil; Palm Kernel Oil; Rapeseed Oil (Colza); Rice Bran Oil; Safflower Oil (Cartamo, Kusum); Sesame Oil (Gingili, Sim-sim, Til); Soybean Oil; Sunflower Oil (Tournesol, Girasol); Marine Oils; Hydrogenated Oils; Interesterified Oils; Castor Oil; Chapter 5. Bleachers; Batch Bleachers; Semicontinuous and Continuous Bleachers; Chapter 6. Filtration and Filters; Factors in Filtration; Filter Membranes; Paper; Textiles; Wire Gauzes (Metal Cloths); Fabric Finishing; Filter-Cloth Selection; Filter Units; Filter Economics; Polishing (Patterson, 1973)
Chapter 7. Oil RecoveryThe Changing Situation; Filter Cake; Oil Recovery by Solvent; Oil Recovery by Hot Water in situ; Oil Recovery by Separate Aqueous Solution; Chapter 8. Safety, Security, and the Prevention of Error; Bleaching-Plant Safeguards; Chapter 9. Important Tests Relating to Bleaching; Purpose and Validity of Tests; Evaluation and Comparison of Bleaching Clays and Other Adsorbents; Fat Content of Filter Cake; Oil Bleachability; Acidity of Bleaching Clay; Particle-Size Distribution; Pore-Size Distribution; Activated Carbon-Adsorption Tests
Chapter 10. The Freundlich Isotherm in Studying Adsorption in Oil Processing

Sommario/riassunto

Since the original publication of this book in 1992, the bleaching process has continued to attract the attention of researchers and the edible-oil industry. In this 2nd edition, the reader is directed to more modern techniques of analysis such as flame-atomic adsorption, graphite furnace atomic adsorption, and atomic emission spectrometry involving direct current plasma (DCP) and inductively coupled Plasma (ICP). It also discusses the Freundlich Equation and reports on high-temperature water extraction, high- temperature oxidative aqueous regeneration, and extraction with supercritical CO2. Finally, various degumming methods improved over the past several decades are discussed.