Refining of coconut oil

Coconut oil is a kind of vegetable oil derived from coconut pulp. It is the main product of international coconut processing and a large product of international oil trade. It has a broad market prospect and is widely used in food industry, cosmetics and detergent industry.

Microwave sterilization machinery and equipment

About half of the world's coconut oil processing plant are used in industry and food, the former mainly for soap making and surfactant, the latter mainly for margarine, cocoa butter and other food oil raw materials.

Coconut oil contains more than 90% saturated fatty acids with iodine value of 7.5-10.5, saponification value of 250-264, unsaponifiable content of

Because some of the free fatty acids in coconut oil are volatile and soluble, they are easy to show their flavor. In addition, coconut oil generally has a higher free fat (more than 3%). Therefore, coconut oil must be well refined when used as food.

We have not carried out chemical refining production of coconut oil, but from the laboratory chemical refining test results can be inferred: coconut oil chemical refining process and other oils (soybean oil, rapeseed oil) is not very different, but has its own characteristics, that is, coconut oil does not need strict acid refining degumming, because its gum content is very small, and coconut oil is very easy to saponify, alkali refining. Improper control will increase the additional loss of neutral oil and increase consumption.

This process is dry physical refining, avoiding the environmental pollution caused by the discharge of soap foot and acidolysis wastewater during chemical refining, which is the great

advantage of physical refining.

As far as refining consumption is concerned, the acid value refining consumption ratio of the whole physical refining process of coconut oil is 1.2-1.3, which is close to the previous level when we treated soybean oil or rapeseed oil with chemical alkali refining decolorization and deodorization.

Considering comprehensively, physical refining, because free fatty acids are all removed by distillation and deacidification, reduces production capacity and increases power consumption per ton of products, but increases the output of mixed fatty acid distillates of high-quality by-products, eliminates the consumption of chemical refining alkali liquor and acid hydrolysis sulfuric acid of soap residue, and power consumption of alkali refining process itself. The economy of final physical refining is equivalent to that of chemical refining.

Physical refining can be completely used for coconut oil. The key is that the heat-sensitive pigment must be completely removed during the decolorization process of pretreatment. Therefore, the physical refining of coconut oil is different from other oils and fats. Although coconut oil is easily hydrolyzed and rancid to produce unpleasant soap flavor, which is not conducive to the application in baked food, its inherent coconut flavor and its cool meltability in the cold drink industry for improving product quality has a unique effect.

Therefore, although the need of high-grade edible coconut oil in the domestic market is only in recent years, the market has great potential for development. Therefore, the physical refining of coconut oil is not only of practical significance, but also of great practical significance.