

Production of Distillate with high content of Fatty Acids

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The production of distillate from the vegetable oil deodorization process yields a mixture of unsaponifiable and saponifiable material. The unsaponifiable materials are tocopherols and sterols. The saponifiable materials are mainly triglycerides (neutral oil), mono and di-glycerides, and fatty acids. The concentrations of these components are dependent on type of refining (chemical or physical), the design of the deodorizer (tray or packed), and the vacuum system.

Today, the value of the distillate is based almost solely on the value of the tocopherols present. The challenge to the processor is how to extract the value from the individual components without dramatically increasing processing costs or losing the current value.

Bunge has developed a process where the fatty acids can be separated and concentrated to a 92-95%, while doubling the tocopherol and sterol concentration in distillate without the use of a separate distillation or vacuum system.