

# Oils and Margarines

## Edible oils, frying oils and margarines



At **SPI** we provide solutions based on our knowledge of raw materials and we collaborate in the study of our customers' industrial processes by providing an in-depth analysis of the most appropriate components and a continuous review of product development costs.

In the process of producing oils, impurities are generated which can modify their smell, taste and stability.

We therefore offer many solutions for the purification and elimination of toxins such as bleaching earth, but also diatomaceous earth, perlite and activated carbon for the refining of edible oils as well as natural or synthetic antioxidants and defoamers.

For margarines, **SPI** have colorants, emulsifiers and flavorings to obtain the good organoleptic properties of the margarine as well as the good industrial characteristics (stabilization of the emulsion, optimization of the industrial process by minimizing losses, plasticity and good spreading of the margarine).

Ask your contact at **SPI** for more information.



## **OILS:**

### **BLEACHING EARTH**

Natural and activated bleaching earths developed from clay have unique absorption and filtration properties recommended for the refinement of edible oils (decrease in levels of chlorophyll and other pigments responsible for coloring, elimination of phosphatins, high absorption of heavy metals, improvement of filtration conditions).

### **FILTRATION**

In the production process of the oils, impurities are generated which must be filtered. Diatomaceous earth and activated carbon are widely used in the purification of edible oils from various raw materials (palm, olive, sunflower, soybean, coconut and rapeseed oil). One of the reasons for its use is mainly to eliminate toxins that are naturally present or carried over as part of the extraction or refining process.

### **ANTIOXIDANTS**

Oils subjected to high temperatures are sensitive to oxidation and need heat-resistant antioxidants to protect them well against oxidation and rancidity.

Antioxidants have been formulated to protect color from photochemical oxidation which allows to maintain the organoleptic properties of finished products throughout the product's shelf life. The range of antioxidants respects: process, temperature, exposure time, presence of water.

3 types of antioxidants: Natural, Semi-Natural and Synthetic

### **ANTI-FOAM (E900)**

The formation of unwanted foam when frying oil is a problem: the quality of the final product decreases and the industrial process can be altered.

Defoamers based on silicone oils are very effective in small doses and very resistant.

### **ESSENTIAL OILS**

Oil frying processes can develop off-flavors that can be masked by essential oils made from aromatic liquid substances extracted from plants. Wide range of tailor-made food essential oils according to need: Coriander, Nutmeg...



## **MARGARINES:**

### **FOOD COLORING**

Margarines can have a more or less intense color depending on the food matrix and the industrial process. The range of colors (natural and chemical, powder or liquid, fat-soluble or water-soluble, standard or custom-made) has been designed to provide the desired color to sauces according to consumer preferences and maintain it throughout their shelf life, from industrial processes and storage to their consumption.

### **FLAVORS**

Flavors (natural or synthetic, liquid or powder, standard or custom)

### **EMULSIFIERS**

Margarine is a water-in-oil emulsion that needs to be stabilized properly.

The use of emulsifiers is a key point to obtain the good organoleptic properties of the margarine as well as the good industrial characteristics (Stabilization of the emulsion, optimization of the industrial process by minimizing the losses, plasticity and good spreading of the margarine...)

### **PRESERVATIVES**

Natural preservatives based on tocopherols, green tea and rosemary.

Synthetic preservatives like BHT, BHA, TBHQ and mixtures.