

Bulletin 14

FLORAMAC

Nowadays, skin care and personal care products were getting more and more in the market as well as the men's products. Most of today's personal care consumers are looking for **natural** products. Most of the high quality vegetable oils are used as emollient but these natural lipid-based emollients are not stable. However, this instability in products can be overcome by adding the anti oxidants into the formula to improve the stability. Here, **Florotech** had produced the products called **Floramac** with incorporation of **Tocopherol** to increase the **Oxidative Stability Index** (OSI).



Oil Stability Index (OSI)

is a method that determines the relative resistance of fat and oil samples to oxidation. All fats and oils are prone to oxidation and the rapidity of oxidation depends on the degree of unsaturation, the presence

of antioxidants, and prior storage conditions. In the OSI analysis, comparison of various oils can be to predict their respective shelf lives. It also used to evaluate the effectiveness of antioxidants or determine how much longer oil can be used before it goes bad.

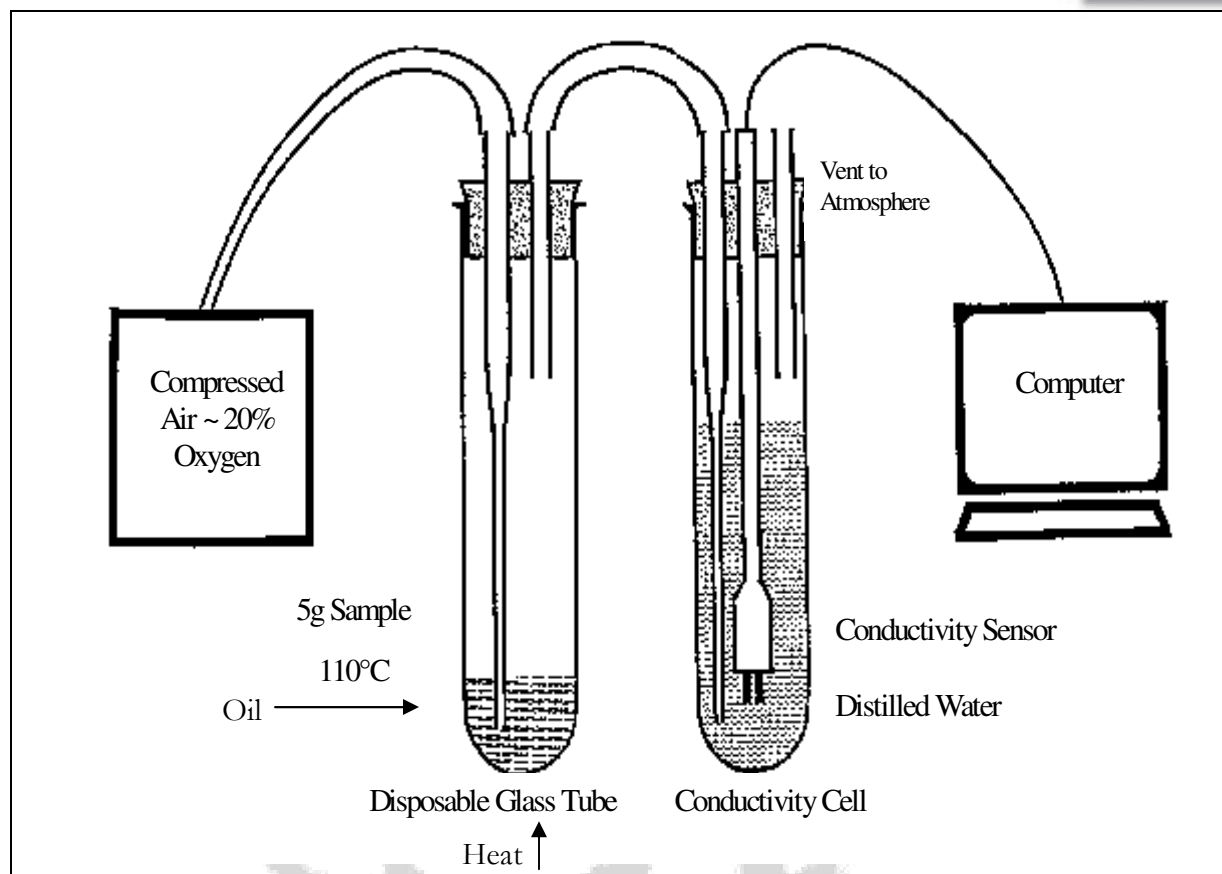


Figure above show how the Oxidative Stability Index Operate. During the measurement a stream of air is passed through the oil or fat sample contained in a sealed and heated reaction vessel. This treatment results in oxidation of the oil or fat molecules in the sample, with peroxides initially being formed as the primary oxidation products. After some time the fatty acids are completely destroyed; the secondary oxidation products formed include low-molecular organic acids in addition to other volatile organic compounds. These are transported in the stream of air to a second vessel containing distilled water. The conductivity in this vessel is recorded continuously. The organic acids can be detected by the increase in conductivity. The time that elapses until these secondary reaction products appear is known as the induction time, induction period or **Oil Stability Index (OSI)**.

Product Introduction

Floramac 10

Floramac 10 [INCI: Ethyl Macadamiate (and) Tocopherol (and) Malic Acid] is a new dry emollient derived from Macadamia and it provides skin feel similar to many silicones and silicone derivatives. Floramac 10 is plant-derived, non-volatile, and has broad coupling and solubility characteristics. It has slipped and spread ability similar to IPM and IPP, but is **non-comedogenic** and **non-irritating**. It is well



suited for increasing sunscreen coverage due to its dry skin feel and high spread and it solubilizes sunscreen actives such as OMC, and Benzophenone-3 easily. Floramac 10 is ideally suited for any application where a Clear, almost colorless to light yellow, liquid at or above ambient temperature.

Properties

Floramac 10 contains about 99.85% of Ethyl Macadamiate, 0.1% of Tocopherol and 0.05% of Malic Acid. It has an HLB requirement of 7.5, oxidative stability of 65 and a refractive index of 1.44. Typical properties of Floramac 10 can be obtained from its Technical Data Sheet.

Function/Claims



Good pigment dispersing agent



Silicone substitute



Non-volatile



Low odor



High spreading



Low slip & viscosity



Very dry skin feel



Solubilizer for sunscreen actives



Clear almost colourless liquid



Fragrance fixative



Add shine & gloss



Application & Guided Formulation

We could provide a wide range of formulas using Floramac 10 and some are stated below:



Cream to powder foundation



Lip balm with Sunscreen



Spray 'N go sunblock



Super Substantive sunscreen



Shaving oil for men



Floramac Macadamia Oil

Floramac Macadamia Oil (INCI: Macadamia Integrifolia Seed Oil) is the non-volatile oil expressed from the nut meat of the [macadamia](#) (*Macadamia integrifolia*) tree as shown beside. It is sometimes used in [food](#) as a frying or salad oil, and in [cosmetic](#) formulations as an [emollient](#) or [fragrance fixative](#). Macadamia oil contains approximately 60% [oleic acid](#), 19% [palmitoleic acid](#), 1-3% [Linoleic acid](#) and 1-2% [Linolenic acid](#). Although macadamia is cultivated in many different parts of the world, the oil's fatty acid profile is not greatly influenced by environmental factors. The oil displays chemical properties typical of a vegetable triglyceride oil. It is also very stable due to its low [polyunsaturated fat](#) content. Floramac Macadamia Oil provides an elegant “cushiony” skin feel due to its palmitoleic content. It provides superior oxidative stability, even in prooxidative environments.



Properties

Floramac Macadamia Oil has a fatty acid profile very similar to that of human skin and has the HLB 7.0-8.0. The composition and properties of the product can be found in the Technical Data Sheet.

Function/Claims



High Palmitic/Palmitoleic Fatty Acids



Low Color



Good skin compatibility



Good absorption



Superior oxidative stability



Good emolliency and lubricant



Add shine and gloss



Slip



Good spreadability



Application:



Luxurious spray-on lotion



Natural lip protectant



Macadamia lip balm



Floratch sunblock stick



Nourishing bath oil



Cuticle treatment oil



Please try our **formulas** and feel the difference for yourself or simply call us for even more formulas!

Contact Us Today!

Whether it is a sales enquiry or a sample request kindly contact us right away:

Our sales office



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