

## SUNFLOWER OIL

### PRODUCT DATA SHEET



**SUNFLOWER OIL** is a Refined, winterized Vegetable Oil that is a natural source of essential fatty acids, a combination of monounsaturated and polyunsaturated fats with low saturated fat levels. It also has beneficial amounts of lecithin.

**SUNFLOWER OIL** is rich in Vitamins A, C, D and E. The high Vitamin E content makes this oil especially helpful for delicate and dry skin. It has a minimal colour level and is a virtually

odourless vegetable oil.

Studies using sunflower oil have been conducted involving pre-term infants that are often susceptible to infection due to their underdeveloped skin. Research suggests that pre-term infants with low birth weight can benefit from sunflower oil skin treatments. Infections decreased by 41% in infants that received a daily skin treatment of sunflower oil. The sunflower oil provided a protective barrier against infection that was not otherwise present on the infant<sup>1</sup>.

### TECHNICAL DATA

<b>Appearance:</b>	Pale yellow, oily liquid with minimum odour
<b>Acidity index:</b>	≤ 1.00 mg KOH/g
<b>Peroxide value:</b>	≤ 10.0 meq O <sub>2</sub> /kg
<b>Specific gravity:</b>	0.90 - 0.93 g/ml

Fatty Acid	Composition
Palmitic acid	3.5 - 8 %
Stearic acid	3 - 7 %
Oleic acid	15 - 85 %
Linoleic acid	5 - 72 %
Linolenic acid	Max. 0.2 %

---

<sup>1</sup> <http://www.medscape.com/viewarticle/501077>

# SUNFLOWER OIL

## APPLICATION

**SUNFLOWER OIL** offers an excellent source of essential fatty acids. Functional applications for this oil include use as a dairy substitute, and in the manufacture of confectionery items.

In cosmetic applications, **SUNFLOWER OIL** is an excellent emollient. It has moisturising, nourishing and conditioning properties, excellent skin feel and is easily absorbed. It is highly recommended for formulations designed to treat dry, weathered, aged, and damaged skin. It can be used in anhydrous products and in emulsions at a concentration of 1-100% of the oil phase.

## OIL STABILITY INDEX (OSI)

The Oil Stability Index (OSI) was determined using a Rancimat instrument. The rapidity of oxidation of an oil depends on the degree of unsaturation, the presence of antioxidants, and prior storage conditions. In the OSI analysis, the rate of oxidation is slow until resistance to oxidation is overcome. This time is known as the oxidation induction period and it is a tool to determine the useful life of the oil.

**SUNFLOWER OIL OSI:** 13.3 hours (100 °C)

ISO 6886 (1996)

Animal and vegetable fats and oils  
Determination of oxidation stability

### Conditions

Sample amount  $2.5 \pm 0.01$  g

Temperature  $100^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$

Gas flow 20 L/h

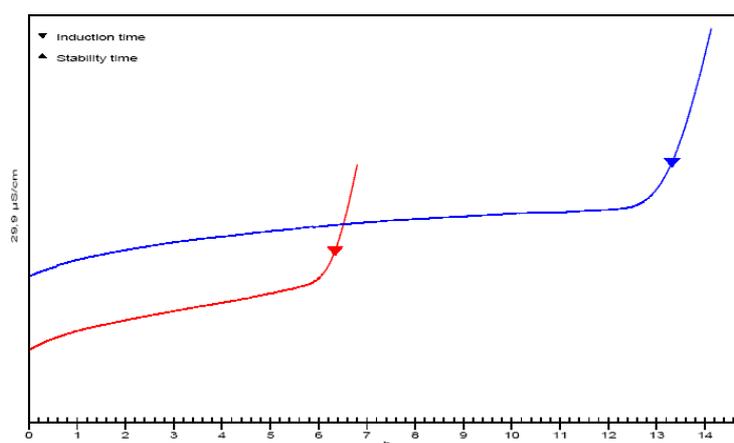
Vessel: 50 mL distilled water

Evaluation Conductivity

Induction time (tangent method)

Blue: determination at 100 °C

Red: determination at 110 °C



**INCI Name:** Helianthus annuus (Sunflower) Seed Oil

**CAS Number:** 8001-21-6