

BORAGE OIL

PRODUCT DATA SHEET



BORAGE is an annual herb originated in Syria, but naturalized throughout the Mediterranean region, most of Europe and North Africa. In the middle ages, borage leaves were commonly brewed into a medicinal tea.

BORAGE OIL is a Virgin Vegetable Oil extracted from the seeds by cold pressing.

BORAGE OIL offers ease of spreading, great penetration and significant moisture retention combined with its high nourishing properties. It is not only very soothing and softening to the skin, but also helps to reduce the redness so often experienced with very sensitive skins.

BORAGE OIL contains up to 25 % of an essential fatty acid called gammalinolenic acid (GLA). Researchers have discovered that eczema may be linked to a deficiency of GLA. The body metabolizes GLA into hormone-like compounds that regulate inflammation and allergic response.

One of the most powerful demonstrations of the benefits to the skin of topically applied **BORAGE OIL** is a clinical study done to 48 infants suffering from severe infantile seborrheic dermatitis (dry scales and crusts). The infants were treated with topically **BORAGE OIL** and the condition cleared within two weeks. This result indicated that the **BORAGE OIL** was effectively absorbed through the skin and became available throughout the body¹.

TECHNICAL DATA

Appearance:	Clear yellow oily liquid
Acidity index:	≤ 2.0 mg KOH/g
Peroxide value:	≤ 10.0 meq O ₂ /kg
Specific gravity:	0.90 - 0.93 g/ml

Fatty Acid	Composition
Linoleic acid (Ω6)	35 - 42 %
γ-Linolenic acid (Ω6)	20 - 25 %
Oleic acid	15 - 20 %
Palmitic acid	9 - 12 %

BORAGE OIL

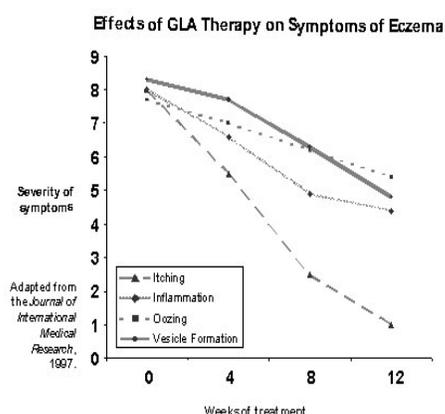
APPLICATION



BORAGE OIL may be applied directly to the skin and hair. It may also be easily incorporated as an active ingredient or an ideal carrier in skin and hair care products. Recommended dosage is between 3 and 10 %.

BORAGE OIL is of great use on problem skins, especially with acne, pimples and blemishes. It can also help treat rosacea by reducing inflammation, controlling the cells metabolism by producing prostaglandins, which stimulate the contraction of blood vessels. The tannins contained in the oil have a slight tightening effect on the skin.

BORAGE OIL can be used directly as massage oil.



Researchers at the University of Italy conducted a study that documented the dramatic effects that **BORAGE OIL** can have on patients with atopic eczema.

The accompanying graph illustrates the results of this study. Researchers have observed that the effects of GLA may continue several weeks or months after stopping the supplementation. Oral dose of 548 mg/day, for 12 weeks.

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.

BORAGE OIL OSI: 4.7 hours (100 °C)

ISO 6886 (1996)

Animal and vegetable fats and oils
Determination of oxidation stability

Conditions

Sample amount 2.5 ± 0.01 g

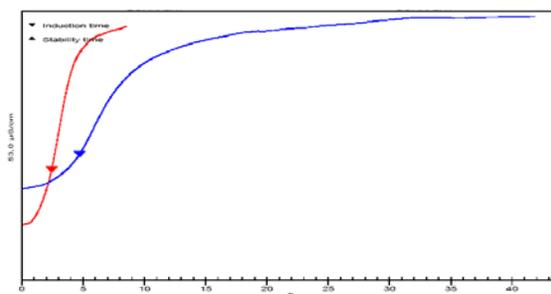
Temperature 100°C ± 0.2°C

Gas flow 20 L/h

Vessel: 50 mL distilled water

Evaluation Conductivity

Induction time (tangent method)



INCI Name: Borago Officinalis Seed Oil.

Blue: determination at 100 °C

Red: determination at 110 °C

1 Tolleson, A., and Frithz, A. 1993. *Borage oil: an effective new treatment for infantile seborrheic dermatitis*. Brit. J. Dermatol. 129:95.

Updated: 01/2007

Approved: Dr. Blanca Martínez

BORAGE OIL

BORAGE OIL**CODE** 008261 **SPECIFICATION** **Nº** 00826104

PARAMETERS	SPECIFICATIONS	DITION - 18/01/2006
Description	Clear yellow oily liquid.	
Peroxide Value (meq/kg oil)	max. 10	
Acid value (mg KOH /g)	max.2.0	
Saponification value	185 - 195	
CROMATOGRAPHY	FATTY ACID COMPOSITION	
Palmitic	9.0 - 12.0 %	
Stearic	3.0 - 5.0 %	
Oleic	15.0 - 20.0 %	
Linoleic	35.0 - 42.0 %	
Gamma - Linolenic	20.0 - 25.0 %	
Gadoleic	3.0 - 5.0 %	
Erucic	1.0 - 4.0 %	

PACKING**REMARKS**

KEEP FULL AND WELL CLOSED IN A DRY PLACE AND AWAY FROM LIGHT