

TECHNICAL DATA SHEET

Borage Oil

GLA 20%

Chemical Properties

Latin Name: *Borago officinalis*

CAS Number: 84012-16-8

Description

Borage Oil is derived from seeds of *Borago officinalis* L. The oil is extracted by cold press or supercritical fluid extraction and then refined. A suitable antioxidant may be added.

Solubility

Practically insoluble in water and in ethanol (96 per cent), miscible with light petroleum.

Specification

Item	Specification	Test Method
Appearance	Clear, light yellow or yellow liquid	Organoleptic
Odor & Taste	Characteristic	Organoleptic
Identification(TLC)	Identical to R.S. sample	USP
Water	Max 0.1%	USP
Acid value	Max 1.0mgKOH/g	USP
Peroxide value	Max 5.0mmol/kg	USP
Saponification Value	184-194mgKOH/g	USP
Unsaponifiable Matter	Max 2.0%	USP
Palmitic acid(C16:0)	8.0-11.0%	USP
Stearic acid(C18:0)	2.0-5.0%	USP
Oleic acid(C18:1)	14.0-19.0%	USP
Gamma-linolenic acid(C18:3)	Min 20%	USP
Linoleic acid(C18:2)	34.0-42.0%	USP
Arachidic acid(C20:0)	Max 0.5%	USP
Gadoleic acid(C20:1)	2.0-6.0%	USP
Behenic acid(C22:0)	Max 0.8%	USP
Erucic acid(C22:1)	Max 5.0%	USP
Nervonic acid(C24:1)	Max 4.5%	USP
Refractive index(20℃)	1.474-1.478	USP
Mercury(Hg)	Max 0.1ppm	USP
Lead(Pb)	Max 0.1ppm	USP
Arsenic(As)	Max 0.1ppm	USP
Cadmium(Cd)	Max 0.1ppm	USP

Benzopyrene	Max 2ppb	USP
Total plate count	Max 1000cfu/g	USP
Yeast & Mould	Max 50cfu/g	USP
Coliform	Max 10cfu/g	USP
<i>E. Coli</i>	Negative	USP
<i>Salmonella</i>	Negative	USP

Ingredients

γ- Linolenic Acid min 20%.

Labeling

In the United States and the European Union: Borage Oil

Applications

- 1). It is widely used in nutritional supplements, food additives.
- 2). It can improve skin and can be used for many different skin problems.
- 3). It also can be used in medicine industry, such as cure of heart.

Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

Handling recommendations

Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a Handling: Keep away from heat, sparks and flame. Avoid contact with eyes, and skin. Wear gloves and safety glasses.

Packaging, Storage & Shelf Life

Package	20kg/drum; or according to customers' requirements.
Storage	Preserve in tight containers, preferably under an atmosphere of an inert gas, protected from light.
Shelf Life	24 months if sealed and stored properly.