

TECHNICAL DATA SHEET

Borage Oil

GLA 20%

Chemical Properties

Latin Name: *Borago officinalis*

CAS Number: 84012-16-8

Description

Borage (*Borago officinalis*) is well known as one of the richest sources of essential fatty acids. Its seed oil is the richest source of γ -linolenic acid (GLA), around 20%, and it is also a fantastic source for vitamins and minerals.

Solubility

It is not soluble in water.

Specification

Item	Specification	Test Method
Appearance	Clear Liquid	Organoleptic
Color	Yellow	Organoleptic
Odor & Taste	Characteristic	Organoleptic
Moisture & Volatile	Max 0.05%	In-house
Insoluble impurities	Max 0.05%	In-house
Acid value	Max 0.6mgKOH/g	In-house
Peroxide value	Max 3.0mmol/kg	In-house
Freezing test	Clarification, transparency	In-house
γ -Linolenic Acid(C18:3)	Min 20.0%	In-house
α -Linolenic Acid(C18:3)	Max 0.8%	In-house
Linoleic Acid(C18:2)	31.0-45.0%	In-house
Oleic Acid(C18:1)	14.0-23.0%	In-house
Stearic Acid(C18:0)	3.0-6.0%	In-house
Palmitic Acid(C16:0)	8.0-12.0%	In-house
Arachic Acid(C20:0)	Max 0.5%	In-house
Eicosenoic Acid(C20:1)	2.8-5.5%	In-house
Saturated Fatty Acid(<C16)	Max 0.5%	In-house
Mercury(Hg)	Max 0.005ppm	In-house
Lead(Pb)	Max 0.05ppm	In-house
Arsenic(As)	Max 0.1ppm	In-house
Cadmium(Cd)	Max 0.1ppm	In-house
Benzopyrene	Max 2ppb	In-house
Total aerobic count	Max 1000cfu/g	In-house

Yeast & Mould	Max 50cfu/g	In-house
Coliform	Max 10cfu/g	In-house
<i>E. Coli</i>	Negative	In-house
<i>Salmonella</i>	Negative	In-house

Ingredients

γ- Linolenic Acid min 20%.

Labeling

In the United States and the European Union: Borage Oil

Applications

Borage Oil can be widely used in solid food, milk powder, and instant beverage.

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	Store at ambient temperature, under dry conditions, protected from heat, light, moisture and oxygen and in tightly closed containers.
Shelf Life	24 months if sealed and stored properly.