



## Borage seed oil

Items	Limit
<b>Fatty Acid Profile</b>	
Palmitic acid	C16:0 8.0 – 15.0 %
Stearic acid	C18:0 3.0 – 8.0 %
Oleic acid	C18:1 14.0 – 25.0 %
Linoleic acid	C18:2 30.0 – 45.0 %
Gamma linolenic acid	C18:3w6 18.0 % min.
Eicocaenoic acid	C20:1 0.0 – 6.0 %
Erucic acid	C22:1 1.0 – 5.0 %
Others	0.0 – 2.0 %
<b>Physical &amp; Chemical Properties</b>	
Color (gardner)	G3 – G6
Acid value	≤ 1.0 mg KOH/g
Peroxide value	≤ 5.0 meq/kg °C
Cold test (0 °C, 5.5 hours)	Clear and transparent
Iodine value	140 – 206 g/100g
Specific gravity	0.912 – 0.940
Refractive index	1.426 – 1.490
Insoluble impurities	≤ 0.20 %
Moisture & volatile	≤ 0.20 %



## Product Specification Borage seed oil

Items	Limit
<b>Microbiology</b>	
Total aerobic count	≤ 100 cfu/g
Molds and yeast	≤ 25 cfu/g
Aflatoxin B1	≤ 2.0 µg/kg
E.coli	not detected
Salmonella	not detected
Staphylococcus Aureus	not detected
<b>Contaminants</b>	
Lead	≤ 0.10 mg/kg
Cadmium	≤ 0.10 mg/kg
Mercury	≤ 0.10 mg/kg
Arsenic	≤ 0.10 mg/kg
Beno(a)pyrene	≤ 2.0 µg/kg
Pesticide solvents	not detected
Residual solvents	≤ 0.10 mg/kg

**Storage durability** The Borage seed oil should be stored at cool (10-15 °C), dry place and protected from light and heat. In the unopened plastic drum, the durability of the oil is 24 months (from date of production). Once opened the drums have to be refilled with nitrogen, closed airtight and the oil has to be used up within 6 months.

**Application area**

- Food: as the cooking oil for cold foods, or salad oil
- Cosmetic: as a carrier oil, helps to prevent wrinkles and keep skin moisture, anti-aging
- Pharmaceutical: in softgel capsule to relieve premenstrual syndrome, improve eczema