



## Organic Borage Oil

INCI: Borago Officinalis (Borage) Seed Oil  
Product ID: ORGOILBOREXPREF20GLAEU742

### Specifications

#### Analytical Details

**Appearance:**  
**Acid Value:**  
**Peroxide Value:**  
**Anisidine Value:**  
**Totox Value:**  
**Moisture:**  
**Saponification Value:**  
**Unsaponifiable Matter:**  
**Refractive Index (20 °C):**  
**Specific Gravity (20 °C):**  
**Iodine Value:**  
**Color (Gardner):**

#### Methods

Organoleptic  
ISO 660  
ISO 3960  
ISO 6885  
Calculated  
AOCS Cd8b : 90(09)  
ISO 3657  
ISO 3596  
ISO 6320  
ISO 6883  
ISO 3961  
DIN 4630

#### Specifications

Clear Bright Yellow Oil  
≤ 4.0 mg KOH/g  
≤ 8.0 meq/kg  
≤ 15.0  
≤ 25.0  
≤ 0.1%  
185.0 - 195.0 mg KOH/g  
≤ 1.5%  
1.470 - 1.480  
0.910 - 0.925 g/mL  
130.0 - 150.0  
≤ 12.0

#### Fatty Acid Profile

<b>&lt; C16:0:</b>	ATM016A	≤ 0.3%
<b>C16:0 Palmitic:</b>	ATM016A	9.0 - 12.0%
<b>C16:1 Palmitoleic:</b>	ATM016A	≤ 0.6%
<b>C18:0 Stearic:</b>	ATM016A	3.0 - 5.5%
<b>C18:1 Oleic:</b>	ATM016A	15.0 - 20.0%
<b>C18:2 Linoleic:</b>	ATM016A	35.0 - 39.0%
<b>C18:3 Alpha Linolenic:</b>	ATM016A	≤ 0.5%
<b>C18:3 Gamma Linolenic:</b>	ATM016A	≥ 20.0%
<b>C18:3 Gamma Linolenic:</b>	ATM016A	≥ 185.0 mg/g as TG
<b>C20:0 Arachidic:</b>	ATM016A	≤ 0.5%
<b>C20:1 Icosenoic:</b>	ATM016A	3.9 - 4.3%
<b>C22:1 Docosenoic:</b>	ATM016A	2.4 - 2.7%
<b>C24:1 Tetracosenoic:</b>	ATM016A	1.4 - 1.7%
<b>Others:</b>	ATM016A	≤ 3.0%

#### Heavy Metals

<b>Lead:</b>	ICPMS	≤ 0.1 mg/kg
<b>Cadmium:</b>	ICPMS	≤ 0.05 mg/kg
<b>Mercury:</b>	ICPMS	≤ 0.05 mg/kg
<b>Arsenic:</b>	ICPMS	≤ 0.1 mg/kg

## NATURAL SOURCING®

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**Microbiological**

<b>Total Viable Count:</b>	TP/006	≤ 1000 cfu/g
<b>Yeast &amp; Mold:</b>	TP/008	≤ 100 cfu/mL
<b>E. Coli:</b>	TP/016	Not Detected
<b>Salmonella:</b>	TP/018	Not Detected / 25g
<b>Staphylococcus Aureus:</b>	TP/012	Not Detected

**Persistent Organic Pollutants**

<b>Benzo(a)pyrene:</b>	ISO 22959	≤ 1.0 µg/kg
<b>Sum of B(a)P, B(a)A, B(b)F, Chrysene:</b>	ISO 22959	≤ 10.0 µg/kg
<b>Sum of Dioxins and Furans (WHO-PCDD/ F-TEQ/g):</b>	QMA504-341, HRMS	≤ 0.75 pg/g
<b>Sum of Dioxins, Furans, Dioxin-like PCBs (WHO-PCDD/F-PCB-TEQ/g):</b>	QMA504-341, HRMS	≤ 1.25 pg/g
<b>PCB's (Sum 28, 52, 101, 138, 153, 180) (Total 6 DIN-PCB):</b>	QMA504-341, HRMS	≤ 40.0 ng/g
<b>Pyrrrolizidine Alkaloids:</b>	GC/GC-MS	≤ 1.0 µg/kg

**Phytosterols and Related Compounds**

<b>Brassicasterol:</b>	ATM019	≤ 0.3%
<b>24-Methylene Cholesterol:</b>	ATM019	9.0 - 20.0%
<b>Campesterol:</b>	ATM019	26.0 - 32.0%
<b>Stigmasterol:</b>	ATM019	≤ 2.2%
<b>β-Sitosterol:</b>	ATM019	20.0 - 29.0%
<b>Sitostanol:</b>	ATM019	≤ 0.6%
<b>Δ-5-Avenasterol:</b>	ATM019	6.0 - 24.0%
<b>Δ-7-Stigmasterol:</b>	ATM019	≤ 0.8%
<b>Δ-7-Avenasterol:</b>	ATM019	≤ 1.0%

**Shelf Life:** 2 Years

**Storage:** Store in a cool, dry place. Avoid light and heat. Keep product airtight. Once opened, cap with nitrogen.

**Note: Pesticide residues are random batch tested annually and are in accordance with European Food Law.**

**Date:** 06/11/2020

Disclaimer: All information, appearing herein on our products is based upon data that are believed to be reliable. However, it is the user's responsibility to determine the suitability of the product before use. Since the actual use of the product is beyond our control, no guarantee, express or implied, is made by Natural Sourcing of the product nor does Natural Sourcing assume any liability arising out of use, by others, of the product referred to herein.

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