

### TECHNICAL DATA SHEET (TDS)

Product Name	BROCCOLI SEED OIL
Botanical Name	Brassica oleracea var. italica
CAS #	223749-36-8
EINECS #	-
INCI Name	Brassica Oleracea Italica (Broccoli) Seed Oil

Part Used	Seeds
Extraction Method	Cold Pressed
Quality	100% Pure and Natural

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>
Appearance	Pale yellow to golden yellow colored liquid
Odour	Slightly herbaceous, characteristic mild odour
Refractive Index	1.465 - 1.475 @ 20°C
Specific Gravity (g/mL)	0.910 - 0.920 @ 20°C
Saponification Value (mgKOH/g)	168 - 190
Peroxide Value (meq O <sub>2</sub> /kg)	Less than 5.0
Iodine Value (g I <sub>2</sub> /100g)	90 - 120
Acid Value (mgKOH/g)	Less than 3.0
Solubility	Soluble in cosmetic esters and fixed oils; Insoluble in water

#### FATTY ACID COMPOSITION:

<u>FATTY ACID</u>	<u>C-CHAIN</u>	<u>SPECIFICATIONS (%)</u>
Palmitic Acid	<u>C16:0</u>	<u>1.00 – 5.00</u>
Stearic Acid	<u>C18:0</u>	<u>Maximum 2.00</u>
Oleic Acid	<u>C18:1 (n-9)</u>	<u>5.00 – 18.00</u>
Linoleic Acid	<u>C18:2 (n-6)</u>	<u>5.00 – 15.00</u>
Alpha-Linolenic Acid	<u>C18:3 (n-3)</u>	<u>6.00 – 12.00</u>
11-Eicosenoic Acid	<u>C20:1 (n-9)</u>	<u>2.00 – 10.00</u>
Erucic Acid	<u>C22:1 (n-9)</u>	<u>42.00 – 60.00</u>

MICROBIAL ANALYSIS	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>
Aerobic Mesophilic Bacterial Count	< 100 CFU/g	ISO 21149
Yeast and Mould	< 10 CFU/g	ISO 16212
Candida albicans	ABSENT / 1g	ISO 18416
Escherichia coli	ABSENT / 1g	ISO 21150
Pseudomonas aeruginosa	ABSENT / 1g	ISO 22717
Staphylococcus aureus	ABSENT / 1g	ISO 22718

<u>HEAVY METAL TESTS</u>	<u>SPECIFICATIONS</u>	<u>STANDARDS</u>
Lead: Pb (mg/kg or ppm)	< 10 ppm	na
Arsenic: As (mg/kg or ppm)	< 2 ppm	na
Mercury: Hg (mg/kg or ppm)	< 1 ppm	na

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