



info@natureinbottle.com  www.natureinbottle.com

## TECHNICAL DATA SHEET (TDS)

<b>Product Name</b>	<b>BROCCOLI SEED OIL</b>
<b>Botanical Name</b>	Brassica oleracea var. italica
<b>Product Code</b>	PCO4032
<b>CAS #</b>	223749-36-8
<b>INCI Name</b>	Brassica Oleracea Italica (Broccoli) Seed Oil

<b>Part Used</b>	Seeds
<b>Extraction Method</b>	Cold Pressed
<b>Quality</b>	100% Pure and Natural

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

**Disclaimer & Caution:** Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. Nature In Bottle provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the product, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of Nature In Bottle, no representation or warranty - expressed or implied - is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of Nature In Bottle is limited to the value of the goods and does not include any consequential loss. Nature In Bottle shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. Nature In Bottle shall not be responsible for any damages resulting from the use of or reliance upon this information.

**FATTY ACID COMPOSITION:**

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

<b><u>MICROBIAL ANALYSIS</u></b>	<b><u>SPECIFICATIONS</u></b>	<b><u>STANDARDS</u></b>
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

<b><u>HEAVY METAL TESTS</u></b>	<b><u>SPECIFICATIONS</u></b>	<b><u>STANDARDS</u></b>
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

**STABILITY AND STORAGE:**

Keep in tightly closed container in a cool and dry place, protected from sunlight. When stored for more than 24 months, quality should be checked before use.

**As it is electronically generated document, hence no signature required.**

**Disclaimer & Caution:** Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. Nature In Bottle provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the product, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of Nature In Bottle, no representation or warranty - expressed or implied - is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of Nature In Bottle is limited to the value of the goods and does not include any consequential loss. Nature In Bottle shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. Nature In Bottle shall not be responsible for any damages resulting from the use of or reliance upon this information.