

TECHNICAL DATA SHEET

Product Name	WHEAT GERM OIL
Botanical Name	Triticum vulgare
Product Code	PCO4023
CAS #	84012-44-2 ; 68917-73-7
EINECS #	281-689-7
INCI Name	Triticum vulgare (Wheat) Germ Oil

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

<u>PROPERTIES</u>	<u>SPECIFICATIONS</u>
Appearance	Light yellow to golden yellow colored liquid
Odour	Characteristic mild wheat-like odour
Refractive Index	1.469 - 1.479 @ 20°C
Specific Gravity (g/mL)	0.915 - 0.930 @ 20°C
Saponification Value (mgKOH/g)	180 - 195
Unsaponifiable Matter (%)	Around 4.90
Peroxide Value (meq O₂/kg)	Less than 5.0
Iodine Value (g I₂/100g)	115 - 140
Free Fatty Acids (% oleic)	Less than 0.5
Acid Value (mgKOH/g)	Less than 1.0
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	C16:0	9.00 – 18.00
Palmitoleic Acid	C16:1 (n-7)	Maximum 0.50
Stearic Acid	C18:0	Maximum 3.0
Oleic Acid	C18:1 (n-9)	14.00 – 28.00
Linoleic Acid	C18:2 (n-6)	50.00 – 62.00
Alpha-Linolenic Acid	C18:3 (n-3)	2.00 – 10.00

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<u>MICROBIAL ANALYSIS</u>	<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

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.

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