

### Product Specification – Bottled vegetable oil

<b>Name of the product:</b>	<b>Refined rapeseed oil</b>
<b>Legal name:</b>	Vegetable oil / Refined rapeseed oil
<b>Product description :</b> Physically refined rapeseed oil obtained from rapeseed made by pressing and extraction. The oil is bleached and deodorized.	
<b>Net weight/volume:</b>	920 g/1 litre
<b>Producer name and address:</b>	BUNGE ZRt Martfű plant , 5435 Martfű, Szolnoki út 201., Hungary
<b>Distributor name and address:</b>	
<b>Ingredients :</b>	Rapeseed oil ( 100% ). Free from additives.

#### Sensory characteristics

Appearance, colour	liquid, light yellow, clear & transparent at 20°C
Taste	neutral or very slight rapeseed taste, free from any foreign taste
Smell	neutral or very slight rapeseed smell, free from any foreign smell

#### Chemical and physical properties

Characteristics	Unit	Typical values	Limit values	Method
Free Fatty Acids (FFA)	%	0,06	max. 0,1	ISO 660
Moisture	%	0,02	max. 0,05	ISO 8534
Insoluble impurities	%	<0,01	max. 0,03	ISO 663
Phosphorus content	ppm	3	max. 5	ISO 10540-1
Soap content	ppm	3	max. 5	Wolff MTLB 007
Peroxide value (at bottling)	meq. O <sub>2</sub> /1 kg	0,6	max. 1,0	ISO 3960
Lovibond colour (5 1/4" cell)	Lovibond unit	1,2R / 12Y	1,5R / 15Y	ISO 15305
Rancimat 743 value (110°C)	hour	8,8	min. 8,0	ISO 6886
Iodine Value	g I <sub>2</sub> /100 g oil	111	105-126	ISO 3961
Erucic acid	%	0,6	max. 1,4	ISO 15304
Trans fatty acids	%	0,9	max. 1,5	ISO 15304
Chlorophyll	mg/kg	<0,02	max. 0,03	AOCS Ca 12-55
Density at 20 °C	g/cm <sup>3</sup>	0,917	0,914 - 0,920	ISO 6883

#### Fatty acid profile

C14:0 myristic	%	0,1	<0,2	ISO 15304
C16:0 palmitic	%	5,0	4,0 - 6,5	ISO 15304
C16:1 palmitoleic	%	0,1	<0,3	ISO 15304
C18:0 stearic	%	1,8	1,0 - 2,5	ISO 15304
C18:1 oleic	%	60,8	55,0 - 66,0	ISO 15304
C18:2 linoleic	%	21,9	15,0 - 26,0	ISO 15304
C18:3 linolenic	%	7,2	5,0 - 9,0	ISO 15304
C20:0 arachidic	%	0,5	<1,0	ISO 15304
C20:1 gadoleic	%	1,1	0,6 - 1,5	ISO 15304
C22:0 behenic	%	0,3	<0,6	ISO 15304
C22:1 erucic	%	0,6	0,1 - 2,0	ISO 15304
C24:0 lignoceric	%	0,1	<0,4	ISO 15304

#### Microbiological values

Salmonella	CFU/25 g	0	0	ISO 6579
E.coli	CFU/g	0	0	ISO 16649-2

### Contaminants, undesirable substances

Characteristics	Unit	Typical values	Limit values	Method
Benzo(a)pyrene (ppb)	ppb	<1	max. 2	ISO 15302
sum. PAH (4)	ppb		max. 10	HPLC
Dioxins (PCDD+PCDF)	ppt		max. 0,75	HRGCMS/HRMS / external lab.
Sum of dioxins and dl PCBs	ppt		max. 1,25	HRGCMS/HRMS / external lab.
Mineral oil ( C10-C56)	ppm	<10	max. 50	ISO/TC 34/SC 11N
Copper (Cu)	ppm	<0,02	max. 0,1	atomic absorption/external lab.
Iron (Fe)	ppm	0,1	max. 0,5	atomic absorption/external lab.
Lead ( Pb)	ppm	<0,05	max. 0,1	atomic absorption/external lab.
Cadmium ( Cd)	ppm	<0,02	max. 0,02	atomic absorption/external lab.
Mercury (Hg)	ppm	<0,01	max. 0,02	atomic absorption/external lab.
Arsenic (As)	ppm	<0,02	max. 0,1	atomic absorption/external lab.

Micotoxins and pesticide residues limit according to valid EU Reg.

**GMO statement:** The product is not the subject to GM labelling requirements as laid down in Reg 1829/2003 and 1830/2003 (EC).

**Origin:** Hungary

**Allergens (1169/2011/EU Reg, Annex II.):**

	Yes / No
Peanuts and products thereof	No
Crustaceans and products thereof	No
Fish and products thereof	No
Eggs and products thereof	No
Nuts and products thereof (Walnuts, Brazil nuts, cashew nuts, pecan, hazelnuts, pistachio, almonds, pine nuts and macadamia nuts )	No
Milk and products thereof	No
Soybean and products thereof	No
Cereals containing gluten and products thereof (Wheat, rye, barley, oats, spelt, kamut or their hybridised strains )	No
Sulphur dioxide and Sulphites ( > 10 mg/kg)	No
Celery and products thereof	No
Sesame and products thereof	No
Mustard and products thereof	No
Lupin and products thereof	No
Molluscs and products thereof	No

If YES, details :

#### Nutritional data per 100 g of product

Typical	unit	100 g	1 portion (10g)
Energy value	kJ (kcal)	3700 (900)	370 (90)
Protein	g	0	0
Carbohydrate	g	0	0
Sugars	g	0	0
Fat	g	100	10
saturated fatty acids	g	8	0,8
mono-unsaturated fatty acids	g	63	6,3
poly-unsaturated fatty acids	g	29	2,9
<i>of which -omega-3</i>	g	7,2	0,7
<i>-omega-6</i>	g	21,8	2,2
<i>trans fatty acids (*)</i>	g	0,9	0,09
Salt	g	0	0

(\*) for internal information, not to be labelled.

#### Packaging information

Primary packaging:	PET bottle (24g), coloured PE cap
Secondary packaging:	corrugated box
Storage and transport requirements	To be protected from direct sunlight, stored at room temperature .
Shelf life	12 months
Traceability data	see the exp.date on the bottleneck
Legal aspects	This product complies with all applicable laws and regulations, including without limitation all current EU regulations and directives, their respective amendmends or replacements in progress on undesirable substances and labelling.
Application	vegetable oil ideal for frying, cooking and salad-dressing
Approved by:	QA / QC department Bunge ZRt