

Product Specification – Bottled vegetable oil				
Name of the product:	Refined sunflowerseed oil			
Legal name:	Vegetable oil / Refined sunflowerseed oil			
Product description :	Physically refined sunflower edible oil obtained from sunflowerseed (Helianthus annuus) by pressing and extraction. The oil is degummed, bleached, winterized and deodorized.			
Net weight/volume:	918.5 g/1 litre			
Producer name & address:	BUNGE ZRt Martfű plant , 5435 Martfű, Szolnoki út 201., Hungary			
Ingredients :	sunflowerseed oil (100%). Free from additives.			
Sensory characteristics				
Appearance, colour	liquid, light yellow, clear & transparent at 20°C			
Taste	neutral or very slight sunflowerseed taste, free from any foreign taste			
Smell	neutral or very slight sunflowerseed 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. 0,08	ISO 8534
Insoluble impurities	%	<0,01	max. 0,05	ISO 663
Phosphorus content	ppm	3	max. 5	ISO 10540-1
Soap content	ppm	3	max. 8	Wolff MTLB 007
Peroxide value (at bottling)	meq. O ₂ /1 kg	0,6	max. 2,0	ISO 3960
Lovibond colour (5 1/4" cell)	Lovibond unit	1,3R / 9Y	max. 1,5R / 12Y	ISO 27608
Rancimat 743 value (110°C)	hour	4,7	min. 4,5	ISO 6886
Iodine Value	g I ₂ /100 g oil	131	118-141	ISO 3961
Tocopherols	mg/kg	580	min. 500	ISO 9936
Trans fatty acids	%	0,5	max. 1,0	ISO 15304
Density at 20 °C	g/cm ³	0,9185	0,918 - 0,923	ISO 6883
Fatty acid profile				
C14:0 myristic	%	0,1	< 0,2	ISO 15304
C16:0 palmitic	%	6,5	5,0 -7,6	ISO 15304
C16:1 palmitoleic	%	0,1	< 0,3	ISO 15304
C18:0 stearic	%	3,4	2,5 -6,5	ISO 15304
C18:1 oleic	%	29,5	18 - 37	ISO 15304
C18:2 linoleic	%	59	53 - 70	ISO 15304
C18:3 linolenic	%	0,1	< 0,3	ISO 15304
C20:0 arachidic	%	0,2	0,1 - 0,5	ISO 15304
C20:1 gadoleic	%	0,2	< 0,3	ISO 15304
C22:0 behenic	%	0,7	0,3 -1,5	ISO 15304
C22:1 erucic	%	-	< 0,3	ISO 15304
C24:0 lignoceric	%	0	< 0,5	ISO 15304
Microbiological values				
Salmonella	CFU/25 ml	0	0	ISO 6579
E.coli	CFU/ml	0	0	ISO 16649-2
Total plate count	CFU/ml	0	100	ISO 4833
Yeast and mould	CFU/ml	0	10	ISO 21527-2
Enterobacteriaceae	CFU/ml	0	10	ISO 21528-2
Staphylococcus Aureus	CFU/ml	<10	10	ISO 6888-1
Bacillus Cereus	CFU/ml	<10	10	ISO 7932

Contaminants, undesirable substances

Characteristics	Unit	Typical values	Limit values	Method
Benzo(a)pyrene (ppb)	ug/kg	<1	max. 2	ISO 15302
sum. PAH (4)	ug/kg		max. 10	HPLC
Dioxins (PCDD+PCDF)	pg/g		max. 0,75	HRGCMS/HRMS / external lab.
Sum of dioxins and dl PCBs	pg/g		max. 1,25	HRGCMS/HRMS / external lab.
Sum of non-dl PCBs (ICES-6)	ng/g		max. 40	HRGCMS/HRMS / external lab.
Mineral oil (C10-C56)	mg/kg	<10	max. 50	LC-GC-FID/ external lab
Copper (Cu)	mg/kg	<0,02	max. 0,1	atomic absorption/external lab.
Iron (Fe)	mg/kg	0,1	max. 0,5	atomic absorption/external lab.
Lead (Pb)	mg/kg	<0,05	max. 0,1	atomic absorption/external lab.
Cadmium (Cd)	mg/kg	<0,02	max. 0,02	atomic absorption/external lab.
Mercury (Hg)	mg/kg	<0,01	max. 0,02	atomic absorption/external lab.
Arsenic (As)	mg/kg	<0,02	max. 0,05	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

Nutritional data per 100 g of product

Typical	unit	100 g	1 portion (10g)
Energy value	kJ (kcal)	3700 (900)	370 (90)
Fat	g	100	10
of wich			
- saturates	g	11	1,1
- mono-unsaturates	g	30	3,0
- poly-unsaturates	g	59	5,9
Carbohydrate	g	0	0
of wich			
- sugars	g	0	0
Protein	g	0	0
Salt	g	0	0
Vitamin E (α - tocopherol)	mg	50	5

Packaging information

Primary packaging:	PET bottle, PE cap
Secondary packaging:	corrugated carton case
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 salad dressing, pickling, frying, cooking.
Issued by:	József Kucsza  QC manager
Approved by :	Ágnes Szemők  QA manager

