

Product Specification – Bottled vegetable oil

Name of the product:	Sunflower frying oil, Bunge PRO F1
Legal name:	Vegetable oil / Refined sunflowerseed oil
Product description :	Physically refined sunflower oil obtained from sunflowerseed (Helianthus annuus) by pressing and extraction. The oil is degummed, bleached, winterized and deodorized. It contains 5 ppm PDMS antifoaming agent.
Net weight/volume:	918.5 g/1 litre
Producer address:	BUNGE ZRt Martfű plant , 5435 Martfű, Szolnoki út 201., Hungary
Ingredients :	Sunflowerseed oil , PDMS (E 900)

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. 0,05	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 loading)	meq. O ₂ /1 kg	<0,5	max. 1,0	ISO 3960
Lovibond colour (5 1/4" cell)	Lovibond unit	1,3R / 9Y	max. 1,5R / 12Y	ISO 27608
PDMS (E900)	ppm	5	5 (target value)	n.a.
Iodine Value	g I ₂ /100 g oil	131	118-141	ISO 3961or ISO 14111
Alfa-tocopherol	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

Fatty acid	Unit	Typical values	Limit values	Method
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	%	29,7	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

Microorganism	Unit	Typical values	Limit values	Method
Salmonella	CFU/25 g	negative	negative	ISO 6579
E.coli	CFU/g	0	0	ISO 16649-2
Total plate count	CFU/g	0	100	ISO 4833
Yeast and mould	CFU/g	0	10	ISO 21527-2
Enterobacteriaceae	CFU/g	0	10	ISO 21528-2
Staphylococcus Aureus	CFU/g	<10	10	ISO 6888-1
Bacillus Cereus	CFU/g	<10	10	ISO 7932

Contaminants, undesirable substances

Characteristics	Unit	Typical values	Limit values	Method
Benzo(a)pyrene	ug/kg	<1	max. 2	ISO 15302
sum. PAH (4)	ug/kg		max. 10	HPLC/FLD
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		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
Fibre	g	0	0
Protein	g	0	0
Salt	g	0	0
Vitamin E (alfa-tocopherol)	mg	50	5

Packaging information

Primary packaging:	PET bottle 10L + PE cap
Storage & transport requirem.	Protect from direct sunlight, store 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 is for frying, cooking, salad dressing, mayonnaise, sauces, canned food, candies
Issued by:	József Kuca  QC manager
Approved by :	Ágnes Szemők  QA manager

