



## Product Specification - Refined Deodorized Sunflower Oil in Bulk

<b>Product Specification - Refined Deodorized Sunflower Oil in Bulk</b>				
<b>Oil Name and Brand :</b>	<b>Refined Deodorized Sunflower Oil "First Grade" (in bulk)</b>			
<b>Method of Production :</b>	Produced by pressing and extraction of sunflower`s seeds followed by removal of non-fatty impurities and related substances in the complete cycle of refinery stages. Sunflower seeds are the fruits of the Helianthus annuus oilseed crop.			
<b>Manufacturer :</b>	LLC «Maslenytsa»			
<b>Type of Packing for Transportation :</b>	rail and road tank cars, flexitanks			
	plastic barrels			
<b>Manufacturing Location Address :</b>	Russia, 396340, Voronezh region, Kashirsky MD, Kolodezyanskoye, oil extraction plant Industrial area, (LLC «Maslenytsa» Branch in Kolodezny)			
<b>Legal address :</b>	Russia, 115114, Moscow, Danilovsky MD, Internal-city Area, Kozhevnickeskaya St., Bldg. 5, 10th floor, premise XX, room 13.			
<b>Composition (ingredients in the decreasing order of content )</b>		% acc.to recipe	Country / Place of origin	
Refined Deodorized Sunflower Oil		100	Russia	
<b>General Requirement and Russian Regulatory Documents :</b>	1) GOST 1129-2013 Sunflower Oil. Specifications 2) CU TR 021/2011 Technical Regulation on the Safety of Foodstuffs. 3) CU TR 024/2011 Technical Regulation on Fat-Oil Products. 4) CU TR 022/2011 On Labeling of Food Products.			
<b>Organoleptic Characteristics</b>				
<b>Consistency</b>	Liquid.			
<b>Transparency</b>	Transparent, no sediment.			
<b>Taste and Odor</b>	No odor, non-specific taste.			
<b>Physical and Chemical Characteristics</b>				
Characteristics	UOM	Typical values at the moment of production	Limit values at the end of expiration	Method
Acid Value, not more	mg KOH/g	0.16	0.4	GOST 31933
Moisture and volatiles weight content, not more	%	0.01	0.1	GOST 11812
Non-fatty impurities weight content, not more	%	absent	absent	GOST 5481
Phosphorated substances weight content, not more	%	absent	absent	GOST 31753
Soap	Qualitative test	absent	absent	GOST 5480
Peroxide value, not more	mmol 1/2 O <sub>2</sub> /kg	0.5	10.0	GOST ISO 3960
Color value, not more	mg iodine	2	10.0	GOST 5477
Cold test	Qualitative test	satisfies the test	satisfies the test	Acc. to Appendix D GOST 1129



Saturated fatty acids weight content (average)	%	12.0	GOST 30418, GOST 31663
Monounsaturated fatty acids weight content (average)	%	24.0	
Polyunsaturated fatty acids weight content (average)	%	63.0	
Trans isomers fatty acids weight content, not more	%	1.0	
<b>Fatty Acid Composition</b>			
C 14:0	%	up to 0.2	GOST 30418, GOST 31663
C 16:0	%	5.0-7.6	
C 16:1	%	up to 0,3	
C 18:0	%	2,7-6,5	
C 18:1 cis	%	14.0-39.4	
C 18:2 cis	%	48.3-77.0	
C 18:3 cis	%	up to 0.3	
C 20:0	%	up to 0.5	
C 20:1	%	up to 0.3	
C 22:0	%	0.3-1.5	
C 22:1	%	up to 0.2	
C 24:0	%	up to 0.5	
<b>Microbiological Points</b>			
not regulated under CU TR 021/2011, CU TR 024/2011			
<b>Safety Data</b>			
<b>Contaminant</b>	<b>UOM</b>	<b>Limits</b>	<b>Method</b>
Benz(a)pyrene	µg/kg	not more than 2	ГОСТ 32123
Dioxins	ng/kg	not more than 0.75	MP-02200-NL EN 16215 equivalent to NEN EN 16215 (Dr.A.Verwey)
Copper (Cu)	mg/kg	not more than 0.1	GOST 30178
Iron (Fe)	mg/kg	not more than 1.5	GOST 30178
Lead ( Pb)	mg/kg	not more than 0.1	GOST 30178
Cadmium ( Cd)	mg/kg	not more than 0.05	GOST 30178
Mercury (Hg)	mg/kg	not more than 0.03	GOST R 54639, GOST 34427
Arsenic (As)	mg/kg	not more than 0.1	GOST 26930
Sum of HCH and isomers	mg/kg	not more than 0.05	GOST 32122
DDT and metabolites	mg/kg	not more than 0.1	GOST 32122
Cesium - 137	Bq/kg	not more than 40	MUK 2.6.1.1194-03



Strontium - 90	Bq/kg	not more than 80	MUK 2.6.1.1194-03
<b>GMO :</b>	The product does not contain GMO and not subject to GMO labeling according to CU TR 022/2011		
<b>Allergens ( CU TR 022/2011 ):</b>		<b>Y / N</b>	
Peanuts and peanut products		N	
Aspartame and aspartame acesulfame salt		N	
Mustard and its derivatives		N	
Sulfur dioxide and sulfites (> 10 mg /kg)		N	
Cereals with gluten and products thereof (wheat, rye, barley, oats, spelt wheat, kamut or their hybridized strains)		N	
Sesame and derivatives		N	
Lupine and its derivatives		N	
Shellfish and derivatives		N	
Milk and dairy products (including lactose)		N	
Nuts and products thereof (walnuts, brazil nuts, cashew, pecan, pistachio, almond, cedar and macadamia)		N	
Crustaceans and products thereof		N	
Fish and fish products		N	
Celery and products thereof		N	
Soya and products thereof		N	
Eggs and products thereof		N	
<b>Labeling of Products*</b>	<b>The quality certificate for products in bulk in rail and road tank cars or flexi tanks contains the following information:</b>		
	1) product name		
	2) manufacturer's name, address and place of manufacture		
	3) net weight		
	4) date of oil production, date of filling and best before date		
	5) designation of the regulatory document in accordance with which the products are manufactured		
	6) physical and chemical test results		
	7) information about certification/confirmation of compliance		
	8) conformity mark		
	9) requirements during transportation and storage conditions		
	<b>Barrels are labeled with the following information:</b>		
	1) product name		
	2) manufacturer's name, address and place of manufacture		
	3) volume and net weight		
	4) batch, date of production / date of filling and best before date		
	5) designation of the regulatory document in accordance with which the products are manufactured		
	6) storage conditions		



	7) package labeling and conformity mark
	<b>Pallets with barrels are labeled with the following information:</b>
	1) product name
	2) manufacturer's name, address and place of manufacture
	3) net weight, number of cargo items on a tray
	4) batch, date of production / date of filling and best before date
* - The information on the label of the products sold to the customer in bulk in rail and road tank cars or flexi tanks shall be specified in the quality certificate	
<b>List of Accompanying Documents</b>	
1) quality certificate	
<b>Transportation and Storage</b>	
Requirements to packaging for transportation :	<p>Rail and road tank cars, flexi tanks shall meet the requirements for the transportation of food products. The inside surfaces of the tanks used specially for the transportation of fat and oil products shall be cleaned off residues of previous cargoes, steamed and dried. It is allowed to "loop" rail and road tankers for several journeys if the same type of product - refined deodorised sunflower oil - is transported.</p> <p>The rail and road tank cars shall be equipped with bottom discharge and tightly closed hatches. The rail tanks shall have inscriptions in accordance with the rules of carriage of goods effective for the corresponding type of transport.</p>
	For filling oil, new plastic barrels certified for the contact with vegetable oils shall be used. The surface of the barrels shall be clean, smooth, with no blisters, through holes, cracks, chipping. The barrels shall be grouped into pallets on trays.
Requirements to transportation :	<p>Sunflower oil shall be transported in accordance with CU TR 024/2011 and CU TR 021/2011.</p> <p>During transportation of the product, measures preventing any kind of contamination and spoilage of the product shall be taken.</p>
Requirements to storage :	<p>It is recommended to keep sunflower oil (in bulk) in covered reservoirs in presence of inert gas (nitrogen) at ambient temperature, but not higher than 25 °C.</p> <p>Plastic barrels with sunflower oil shall be stored in clean, dry premises, with no off odors, not exposed to direct sunlight, at temperature not exceeding the room temperature, but not higher than 25 °C.</p>
Best Before date :	9 months
Batch identification :	<p>For bulk product in rail and road tank cars, flexitanks: date of oil production, tank number</p> <p>For bulk product in plastic barrels : date of oil production, production order number, process line number, tank number</p>
Designation :	For direct consumption and for food production.
The product is not applicable:	For baby food.