

**PRODUCT SPECIFICATION №88/1****Product:** High oleic sunflower oil refined deodorized winterized mark P**Normative document:** DSTU 9127:2021**Application:** for direct consumption in food, for selling in markets.**Composition:** High oleic sunflower oil refined deodorized winterized mark P.**1. Organoleptic characteristic:**

Name of indicator	Description	Method of control	Periodicity of control
Taste and odor	Taste of impersonal oil, odorless	DSTU 8842	Each batch
Transparency	Transparent, without any sediment	DSTU 8842	Each batch

**2. Physicochemical characteristics:**

Characteristic, unit	Data	Method of control*	Periodicity of control
Moisture and volatile matters, %, max	0,1	DSTU ISO 662	Each batch
Iodine value, gI <sub>2</sub> /100g	78-90	DSTU EN ISO 3961	Each batch
Color, mg I <sub>2</sub> , max	10,0	DSTU 4568	Each batch
Acid value, mg KOH/g, max	0,15	DSTU 4350	Each batch
Peroxide value, ½ O mmol/kg, max: - in production	1,0	DSTU EN ISO 3960	Each batch
Mass fraction of trans-isomers content, %, max	1,0	DSTU ISO 15304	Each batch
Mass fraction of phosphorus-containing substances, %, not more than: - in terms of stearoleolecithin	Absence	DSTU 7082	Each batch
Mass fraction of insoluble impurities, %, max	Absence	DSTU EN ISO 663	Each batch

**Note 1.** According to DSTU 9127:2021 «Peroxide value» at the end of the shelf life is not more – 10,0 ½ mmol/kg.

\*\* In the case of oil production for export, the rate of "Iodine number" is regulated according to CODEX STAN 210-1999.

\*\*\* Microbiological indicators are checked according to the client's requirements based on the contractual relationship and the client's specification.

\* Equivalent method maybe used at different production sites

**3. Nutritious value per 100g of product:**

Characteristic, unit	Data	Target value
	100 g	100 g
<b>Fats, g, of which:</b>	≥99,9	99,9
saturated fatty acids	6,2-13,9	8
mono-unsaturated fatty acids	75,1-91,4	83
poly-unsaturated fatty acids	2,1-17,3	9
oleic acid, not less than	75 <sup>1</sup>	80 <sup>1</sup>
<b>Carbohydrates, g, of which:</b>	0	0
sugars	0	0
<b>Proteins, g</b>	0	0
<b>Salt, g</b>	0	0
<b>Energy value (calories) per 100 g of product:</b>		
kJ	3696	3696
kcal	899	899

<sup>1</sup> The "Oleic acid" indicator may differ from the value indicated in Table 3 depending on the agreed specification to the contract with the client.

**4. Allergen list:**

Ingredients containing Allergens	Present in the product supplied (√-yes / X-no)	Present on the site (√-yes / X-no)	Control measures where allergen is present to prevent cross contamination
Cereals containing gluten and products there of	X	X	-
Crustaceans and products there of	X	X	-
Eggs and products there of	X	X	-
Fishes and products there of	X	X	-
Peanuts and products there of	X	X	-
Soya and products there of	X	X	-
Nuts and products there of	X	X	-
Milk and products there of (including lactose)	X	X	-
Celery and products there of	X	X	-
Mustard and products there of	X	X	-
Sesame seeds and products there of	X	X	-
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO <sub>2</sub> (E220-E228)	X	X	-
Lupin and products there of	X	X	-
Molluscs and products there of	X	X	-



**5. Safety indicators\*\*\*\*:**

Characteristic, unit	Data	Method of control	Periodicity of control
<b>Toxic elements, mg/kg, max:</b>			
Lead	0,1	According to the methods approved in the established order	Once in 3 months in ready products
Mercury	0,03		
Arsenic	0,1		
Iron	5,0		
Copper	0,4		
Cadmium	0,05		Once a year in ready products
<b>Pesticides, mg/kg, max:</b>			
Hexachlorocyclohexane ( $\gamma$ -HCCH)	0,05	According to the methods approved in the established order	Once a year in raw material
DDT	0,1		
Heptachlor	not allowed		
<b>Mycotoxins, <math>\mu</math>g/kg, max:</b>			
Aflatoxine B1	2,0	According to the methods approved in the established order	Twice a year in raw material
<b>Radionuclides, Bq/kg, max:</b>			
Cesium-137	100	According to the methods approved in the established order	Once a year in ready products
Strontium-90	30		
<b>Dioxins and PCB's:</b>			
sum of dioxins (WHO-PCDD/F-TEQ), pg/g fat	0,75	According to the methods approved in the established order	Once a year in ready products
sum of dioxins and dioxin-like PCB (WHO-PCDD/F-TEQ), pg/g fat,	1,25		
sum of PCB28, PCB52, PCB101, PCB138, PCB153 и PCB180 (ICES-6), ng/g fat, max	40		
<b>Polycyclic aromatic hydrocarbons, <math>\mu</math>g /kg, max:</b>			
Benzo(a)pyrene	2,0	According to the methods approved in the established order	Once a year in ready products
Sum Benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene	10,0		
<b>Melamine and its structural analogues, mg/kg, max:</b>			
Melamine	2,5	According to the methods approved in the established order	Once a year in ready products
<b>Natural plant toxins, g/kg max:</b>			
Erucic acid including erucic acid bound in fat	20,0	According to the methods approved in the established order	Once a year in ready products
<b>Glycidyl esters of fatty acids in terms of glycidol, <math>\mu</math>g/kg, max:</b>			
Content of glycidol fatty acid esters	1000	According to the methods approved in the established order	During the production process

\*\*\*\*As required to REGULATION (EC) № 1881/2006, establishing maximum levels of certain contaminants in food products.

**Additional Information:** High oleic sunflower oil refined deodorized winterized mark P during production is not subject to the influence of ionizing radiation, raw materials and ingredients of animal origin are not using.

According to Annex 1 to the Law of Ukraine "On Consumer Information on Food" dated 06.12.2018 №2639-VIII, the product is not an allergen.

Market operator – LLC «Delta Wilmar Ukraine»; production address - 6, Industrialna Str., Yuzhne, Odesa region, Ukraine, 65481.

Type of activity to be carried out with the use of capacity - production of food products, the ingredients of which are including products of plant origin and/or processed products of animal origin and assigned to this capacity personal registration number **r-UA-15-29-57**.

**Product doesn't contain GMO.**

**Packing:** The following packing options are available:

- 0,85L PET bottle with press-on type oil cap (12 pcs per carton box)
- 0,99L PET bottle with press-on type oil cap (12 pcs per carton box)
- 1L PET bottle with press-on type oil cap (12 pcs per carton box)
- 1,8L PET bottle with side handle and screw type cap (9 pcs per carton box)
- 2L PET bottle with press-on type oil cap (6 pcs per carton box)
- 3L PET bottle with top handle and screw type cap (4 pcs per carton box)
- 5L PET bottle with top handle and screw type cap (4 pcs per carton box)
- the product is packed in a corrugated box with a plastic bag with a neck and a lid, with a net weight of 10kg, 20 kg;
- truck, flexitank, vessel.

**Shelf life:**

**It is better to consume until the end of the period from the date of production, at temperature:**

from 0 °C to +30 °C incl. – 24 months,  
store in closed darkened rooms.

**Shelf life for bulk products:**

**It is better to consume until the end of the period from the date of production, at temperature:**

from 0 °C to +30 °C incl. – 12 months.

**Transportation:** According to the conditions of international rules for this type of product.

**Remarks:** The information is presented based on Standard Certificate of Analysis of product only for your consideration.

**Final specification for product is subject to Contractual Agreement.**

LLC «Delta Wilmar Ukraine»	Position	First name/Last name	Signature	Date
<b>Developed:</b>	Technologist	Liliia CHYSTIAK		01.02.2024
<b>Agreed:</b>	Chief technologist	Svitlana KULINICH		01.02.24
	Leading manager of work with key clients	Anastasia SINITSYNA		01.02.24
	Head of Laboratory	Olha DEYNEKA		01.02.24