

PRODUCT SPECIFICATION №84/1

Product: Sunflower oil refined deodorized winterized mark P
(PET packaging, with vitamin A & vitamin D)

Normative document: DSTU 4492:2017

Application: for direct consumption in food, for selling in markets.

Composition: sunflower oil refined deodorized winterized mark P, vitamin A, vitamin D.

Dosage according to customer specification: vitamins: A- 30000 -70000 IU/kg oil, D – 1000-4000 IU/kg oil.

Target: vitamins: A - 30000 IU/kg oil, D - 3000 IU/kg oil.

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 ₂ /100g	118-141**	DSTU EN ISO 3961	Each batch
Color as Lovibond units of red, max	1,5	DSTU 4568	Each batch
Free Fatty Acid (as oleic), %, max	0,1	DSTU 5062	Each batch
Peroxide value, ½ O mmol/kg, max: - in production	2,0	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 - in terms of P ₂ O ₅	Absence Absence	DSTU 7082	Each batch
Mass fraction of insoluble impurities, %, max	Absence	DSTU EN ISO 663	Each batch
Cold test at 0°C for 5,5 hours	Passed	DSTU 4602	Each batch
Saponification value, mg KOH/g	187-194	DSTU ISO 3657	Each batch

Note 1. According to DSTU 4492:2017 «Peroxide value» at the end of the shelf life is not more – 10,0 ½ O 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 / 100 ml of product:

Characteristic, unit	Data****		Target value	
	100 g	100 ml	100 g	100 ml
Fats, g, of which:	≥99,9	≥92	99,9	92
saturated fatty acids	8,1-16,8	7,5-15,5	13	12
mono-unsaturated fatty acids	14-40	13-37	27	25
poly-unsaturated fatty acids	48,3-74,3	44,4-68,4	60	55
Carbohydrates, g, of which:	0	0	0	0
sugars	0	0	0	0
Proteins, g	0	0	0	0
Salt, g	0	0	0	0
Vitamin A*****, µg	1650-3850	1520-3542	2540	2337
Vitamin D*****, µg	3-10	2,7-9,2	7,5	6,9
Energy value (calories) per 100 g / 100 ml of product:				
κJ	3696	3404	3696	3404
kcal	899	828	899	828

**** Data according to customer specification with dosage limits.

***** The addition of vitamins to food products is carried out in accordance with the Order of the Ministry of Health of Ukraine No. 1613 of July 16, 2020 "Rules for adding vitamins, minerals and some other substances to food products".

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 ₂ (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
Toxic elements, mg/kg, max:			
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		
Zin	5,0		
Pesticides, mg/kg, max:			
Hexachlorocyclohexane (γ -HCCH)	0,05	According to the methods approved in the established order	Once a year in raw material
DDT	0,1		
Heptachlor	not allowed		
Mycotoxins, μg/kg, max:			
Aflatoxine B1	2,0	According to the methods approved in the established order	Twice a year in raw material
Sum aflatoxine B1, B2, G1 and G2	4,0		
Zearalenone	10,0		
Radionuclides, Bq/kg, max:			
Cesium-137	100	According to the methods approved in the established order	Once a year in ready products
Strontium-90	30		
Natural plant toxins, g/kg max:			
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
Glycidyl esters of fatty acids in terms of glycidylol, μg/kg, max:			
Content of glycidylol fatty acid esters	1000	According to the methods approved in the established order	During the production process

Additional Information: 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).

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. – 20 months,
store in closed darkened rooms.

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.

	Position	First name/Last name	Signature	Date
Developed:	Technologist	Liliia CHYSTIAK		01.02.2024
Agreed:	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