

**SPECIFICATION №91/1
on product:**

**Table margarine «82%»
(batch number «PEU»)**

Normative document: DSTU 4465:2005

Application: used in the bakery, confectionery, culinary, food concentrate and canning industries, in home cooking, in the restaurant chain and in other branches of the food industry.

The product does not contain partially and/or fully hydrogenated fats.

Ingredients: vegetable oils refined bleached deodorized: palm oil and its fractions, sunflower oil in variable proportions, drinking water, food salt, emulsifiers: distilled monoglyceride (E471), polyoxyethylene (20) sorbitan monooleate (E433), sunflower lecithin (E322(i)), preservative potassium sorbate (E202), acidity regulator citric acid (E330), flavoring «Butter», food coloring beta-carotene (E160a(i)).

1. ORGANOLEPTIC CHARACTERISTICS:

Name of characteristics	Description	Method of control	Periodicity of control
Consistence at temperature (20±2)°C	Homogeneous, plastic, dense, ointment consistence is allowed. The surface of the cut is shiny or slightly shiny, it is allowed to be matte, dry in appearance	DSTU 4463	Each batch
Color	From light yellow to yellow, homogeneous in a whole mass	DSTU 4463	Each batch
Taste and odor	Taste and smell clean, creamy or dairy-cream inherent in the flavor that is used. Foreign tastes and odors are not allowed	DSTU 4463	Each batch

2. PHYSICAL AND CHEMICAL CHARACTERISTICS:

Characteristic, unit	Data	Method of control*	Periodicity of control
Melting point, °C	35-39	DSTU EN ISO 6321	Each batch
Peroxide value in the fat extracted from margarine, ½ O mmol/kg, max: - in production	1,0	DSTU EN ISO 3960	Each batch
Moisture and volatile matters, %, max	17,93	DSTU ISO 662	Each batch
Mass fraction of salt, %, max	0,3	DSTU 4463	Each batch
Acidity, °Kettstorfer, max	2,5	DSTU 4463	Each batch
Mass fraction of trans-isomers content in fat extracted from margarine, %, max	2,0	DSTU ISO 15304	Each batch
Solid fat content, %, at temperature: 10 °C 20 °C 30 °C 35 °C	39-48 18-26 7-13 ≤8	DSTU EN ISO 8292-1	Each batch

Note 1. According to DSTU 4465:2005 «Peroxide value» at the end of the shelf life is not more – 10,0 ½ O mmol/kg.

*Equivalent method maybe used at different production sites.

3. NUTRITIONAL VALUE PER 100 g OF PRODUCT:

Characteristic, unit	Data	Target value	The value in the fat extracted from margarine, %
Fats, g, of which:	≥82,0	82,0	100
saturated fatty acids	31-41	36	38-50
mono-unsaturated fatty acids	18-29	24	23-35
poly-unsaturated fatty acids	17-27	22	21-33
including lauric fatty acid (C12)	0,82	<1,0	1,0
Carbohydrates, g, of which:	0	0	-
sugars	0	0	-
Proteins, g	0	0	-
Salt, g	0,3	0,3	-
Energy value (calories):			
kJ	3034	3034	-
kcal	738	738	-

4. MICROBIOLOGICAL CHARACTERISTICS:

Name of characteristics, unit	Data	Method of control	Periodicity of control
Coliforms, in 0,01 g	not allowed	DSTU 7357, DSTU 8535, DSTU ISO 4831, GOST 30518	Once in 2 months after production
Salmonella spp, in 25 g	not allowed	DSTU EN 12824 DSTU FprEN ISO 6579-1 DSTU CEN ISO/TS 6579-2 DSTU ISO/TR 6579-3	
Mould, CFU/g, max	1·10 ²	DSTU ISO 7954, DSTU 8447, DSTU 8535	
Yeasts, CFU/g, max	1·10 ³		

5. SAFETY CHARACTERISTICS:

Name of characteristics	Maximum allowable levels	Method of control	Periodicity of control
Mass fraction of toxic elements, mg/kg, max:			
Lead	0,1	According to the methods approved in the established order	Once in 3 months in ready products
Mass fraction of pesticides, mg/kg, max:			
hexachlorocyclohexane (α, β, γ-isomers)	0,05	According to the methods approved in the established order	Once a year in raw material
DDT	0,1		
heptachlor	not allowed		
Mass fraction of mycotoxins, µg/kg, max:			
Aflatoxine B1	2,0	According to the methods approved in the established order	On demand
Total amount of aflatoxin B ₁ , B ₂ , G ₁ and G ₂	4,0		
Mass fraction of 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		

Name of characteristics	Maximum allowable levels	Method of control	Periodicity of control
Mass fraction of dioxins and PCBs:			
sum of dioxins (WHO-PCDD/F-TEQ), pg/g fat, max	0,75	According to the methods approved in the established order	Once a year in ready products
sum of dioxins and dioxin-like PCBs (PCBS/WHO-PCDD/F-PCB-TEQ), pg/g fat, max	1,25		
sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180 (ICES-6), ng/g fat, max	40		
Polycyclic aromatic hydrocarbons, µg /kg, max:			
Benzo(a)pyrene	2,0	According to the methods approved in the established order	Once a year in ready products
Sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and chrysene	10,0		
Melamine and its structural analogues, mg/kg, max:			
Melamine	2,5	According to the methods approved in the established order	Once a year in ready products
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
The sum of fatty acid esters of 3-monochloropropanediol, expressed as 3-MCPD and glycidyl esters of fatty acids in terms of glycidylol, µg/kg, max:			
Content of 3-MCPD fatty acid esters	2500	According to the methods approved in the established order	During the production process
Content of glycidylol fatty acid esters**	1000		

** It is possible to determine the indicator "Content of glycidol fatty acid esters" at the request of the customer according to the approved methods at the enterprise.

6. ALLERGEN LIST:

Ingredients containing Allergens	Contained in the product (YES / NO)	Present at the production (YES / NO)
Cereals containing gluten and products there of	NO	NO
Crustaceans and products there of	NO	NO
Eggs and products there of	NO	NO
Fishes and products there of	NO	NO
Peanuts and products there of	NO	NO
Soya and products there of	NO	NO
Nuts and products there of	NO	NO
Milk and products there of (including lactose)	NO	NO
Celery and products there of	NO	NO
Mustard and products there of	NO	NO
Sesame seeds and products there of	NO	NO
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂ (E220-E228)	NO	NO
Lupin and products there of	NO	NO
Molluscs and products there of	NO	NO

7. PACKAGING:

The product is packed in corrugated boxes with polyethylene liner, with a net weight of 10 kg, 20 kg.

8. STORAGE AND TRANSPORTATION:

Shelf life for packaged products and storage conditions:	<p>It is better to consume until the end of the period from the date of production, at temperature: from minus 20 °C to 0 °C incl. – 18 months, from 0 °C to +10 °C incl. – 12 months, from +10 °C to +25 °C incl. – 9 months, store in warehouses with permanent circulation of air or refrigerators at a relative humidity not more than 80%. Table margarine «82%» is stored separately from other products that have a strong specific odor.</p>
Conditions of transportation	In compliance with sanitary and hygienic standards in clean, closed and dry vehicles, without foreign odors, in accordance with the rules for the transportation of goods applicable to this type of transport






Additional information: Table margarine «82%» 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 №2639-VIII dated 06.12.2018 «On Consumer Information on Food», the product is not an allergen.

Market operator – LLC «Delta Wilmar Ukraine»; address of production capacity - 6, Industrialna str., Pivdenne, Odesa district, Odesa region, 65481, Ukraine.

Product doesn't contain GMO.

Final specification for product is subject to Contractual Agreement.

LLC «Delta Wilmar Ukraine»	Position	First name/Last name	Signature	Date
Developed:	Technologist	Inna PALAMARCHUK		01.01.2025
Agreed:	Chief technologist	Svitlana KULINICH		01.01.2025
	Commercial director	Ruslan ZAGREBELNIY		01.01.2025
	Head of Laboratory	Tetyana RADENKO		01.01.2025
	Leading microbiologist	Inna KASIANCHUK		01.01.2025