

LLC «TH «Shchedro»	Specification for finished product	<b>M.C.60.006A</b>	
		Valid as of	
		Valid till the moment of replacement with new one	
<b>Table margarine «Stolychnyi special» 60% fat content (formulation «A») State Standards of Ukraine DSTU 4465:2005</b>			
<b>FOR INTERNAL AND EXTERNAL USE</b>			

## **GENERAL DESCRIPTION**

**Margarine «Stolychnyi special»** is meant to be used in bread making, candy and culinary production and in the field of restaurant business. Margarine has a high nutrition and energy value.

Margarine evenly distributes in the dough; it ensures proper expansion of rich fermented goods; it improves vesiculation of ready-made baked foods; it gives beautiful taste, golden brown and delicate flavour to baked foods. Moreover, it enables to increase the shelf life of the finished product.

It is manufactured according to State Standards of Ukraine DSTU 4465:2005 "Margarines. General technical specifications".

**Ingredients:** mixture of high-quality vegetable oils and fats in the natural and partially hydrogenated form of refined deodorized oil, drinking water, cooking salt, emulsifier (E471), natural dye, beta-carotene, butter flavor, preservative sorbic acid, acidity regulator lactic acid.

## **GENERAL REQUIREMENTS**

**Raw materials** used for manufacturing of product have to comply with legislative requirements of Ukraine or Codex Alimentarius. In the event of availability of severer requirements of the consumer or the country to which the product is exported, the severer requirements shall prevail.

Safety indicators of the **finished product** have to comply with legislative requirements of Ukraine. In the event of availability of severer requirements of the consumer or the country to which the product is exported, the severer requirements shall prevail.

## **ORGANOLEPTIC PARAMETERS**

Name of parameter	Characteristic	Method of control	Frequency of control
Texture at (20 ± 2)°C	Plastic, dense, homogeneous texture. The cut surface is shiny or slightly glossy. Dry in appearance.	State Standards of Ukraine DSTU 4463	Every batch
Colour	From white to yellow.	State Standards of Ukraine DSTU 4463	Every batch
Taste and aroma	Clean, peculiar to added flavouring agent. Foreign smells and off-taste is not allowed.	State Standards of Ukraine DSTU 4463	Every batch

## **PHYSICAL AND CHEMICAL PROPERTIES**

Name of parameter	Target value	Allowable range	Method of control	Frequency of control
Moisture and volatile matters content, %, not exceeding	39,5	39,5	State Standards of Ukraine DSTU 4463	Every batch
Margarine acidity, °Koettstorfer	2,5	not exceeding 2,5	State Standards of Ukraine DSTU 4463	Every batch
Fat content, %, no less than	60,0	no less than 60,0	State Standards of Ukraine DSTU 4463	Every batch
Melting temperature, °C	30-35	27-35	State Standards of Ukraine DSTU 4463 State Standards of Ukraine DSTU ISO 6321	Every batch
Peroxide number, not exceeding, 1/2O mmol/kg - as of the moment of production	2,0	not exceeding 5,0	State Standards of Ukraine DSTU 4570 State Standards of Ukraine DSTU ISO 3960	Every batch

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Content of solid triglycerides, % at 20°C	19-24	17-26	Method of measurement performance MVV 081/12-0731-11 State Standards of Ukraine DSTU ISO 8292	Every batch

Fatty acid content	
Parameter	Content, %
Amount of trans-isomers of fatty acids	15 – 25
Saturated acids	23 – 38
Monounsaturated acids	40 – 50
Polyunsaturated acids	21 – 31

#### Nutrition and energy value

Parameter	Value
Nutrition value of 100 g of product, no less than	60,0 g
Energy value of 100 g of product, no less than	540 kcal

#### **QUALITATIVE**

Parameter	Requirements
Foreign impurities	None

#### **MICROBIAL ATTRIBUTES**

Name of attribute	Allowable range	Method of control	Frequency of control
Escherichia coli group bacteria – CGB, in 0,01 (g, cm <sup>3</sup> )	is not allowed	State Standards of Ukraine DSTU 7357:2013 State Standards of Ukraine DSTU IDF 73 A 2003	Once per month
Pathogenic, including salmonella bacteria, in 25 (g, cm <sup>3</sup> )	is not allowed	State Standards of Ukraine DSTU EN 12824:2004	Once per month
Mold fungi, CFU in 1 g, not exceeding	1X10 <sup>2</sup>	State Standards of Ukraine DSTU ISO 6611/IDF 94:2007	Once per month
Yeast, CFU in 1 g, not exceeding	1X10 <sup>3</sup>	State Standards of Ukraine DSTU ISO 6611/IDF 94:2007	Once per month

#### **CONTENT OF TOXIC ELEMENTS, PESTICIDES AND MYCOTOXINS**

Safety indicators	Objective	Methods	Frequency of control
<b>Toxic elements, ppm wt, not exceeding:</b>			
Plumbum	0,1	According to methods approved according to the established procedure	It shall be established and warranted by the manufacturer according to production control program
Cadmium	0,05		
Mercury	0,05		
Arsenic	0,1		
Ferrum	5,0		
Zink	10,0		
Cuprum	1,0		
<b>Pesticides, ppm wt, not exceeding:</b>			
Hexachlorocyclohexanes (γ-HCCH)	0,05		

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DDT	0,1		
Heptachlor	absence		
Aldrin	absence		
Metaphos	absence		
<b><u>Mycotoxins ppm wt, not exceeding:</u></b>			
Aflatoxin B1	0,005		
Zearalenone	1,0		
<b><u>Radionuclides, not exceeding:</u></b>			
Cesium-137	100 Bq/kg		
Strontium-90	30 Bq/kg		

### **PRE-PACKING, STORAGE AND TRANSPORTATION**

<b>Parameter</b>	<b>Requirements</b>
Pre-packing	Corrugated box. Margarine net weight 10 and 20 kg.
Storage conditions	Product shall be stored in warehouse premises or refrigerators at the temperature from 0°C to plus 10°C under the condition of constant air circulation. It is not allowed to store the product together with products that have strong peculiar odor.
<b>Safekeeping from the date of manufacture</b>	<b>Storage conditions</b>
180 days	At the temperature over 0°C up to plus 4°C.
160 days.	At the temperature over plus 4°C up to plus 10°C.

<b>Approved by:</b>	<b>Signature</b>	<b>Date of approval</b>
Head of Quality Control Department		
Chuchko N.P.		
Head of Production Technology Department		
Starchenko Z.D.		
Head of testing laboratory		
Zhukova E.A.		

#### **Executed by:**

Head of developments control department  
Druzhchenko A.K.