

PRODUCT SPECIFICATION

Product:	Sunflower Oil Refined Deodorized Chilled, Grade P
Ingredients:	100% Pure Sunflower Oil
Product description:	Physically refined edible oil of vegetable origin obtained from seeds of the sunflower plant (<i>Helianthus annuus</i>) by pressing. The oil is bleached, chilled, and deodorized.
Product origin:	UKRAINE
Place of manufacture:	In UKRAINE by order of SF TRADE company
Primary packaging:	Bulk in flexitank or tanker truck
Secondary packaging:	Sea container 20`
Store and transport requirements:	To be stored in places protected from precipitation fallout and sunlight.
Shelf life:	24 months from the date of bottling, if stored in a dark indoor area within the recommended temperature from 0°C to 30°C.
Regulatory reference:	Quality of the product is in compliance with requirements of DSTU 4492 "Sunflower Oil Specifications" (Ukrainian national standards)
Application purpose:	Sunflower oil is used for frying, hot cooking, and hot/cold salad-dressing.

SENSORY CHARACTERISTICS

Appearance, color:	Clear oily liquid, without sediment
Taste:	Neutral, free from any foreign taste
Odor:	Neutral, free from any foreign odors

PHYSICAL AND CHEMICAL PREPERTIES

Test item name and unit	Reference Value	Actual Value
Color number <i>mg iodine, not more than</i>	10	1
Acid number <i>mg KOG/g, not more than</i>	0,25	0,09
Peroxide number <i>½ O mmol/kg, not more than</i>	10	0,45
Content of phosphoric substances in terms of stearooleolecithin <i>% by weight, not more than</i>	None	None
Non-fat impurity content <i>% by weight, not more than</i>	None	None
Moisture and volatiles content <i>% by weight, not more than</i>	0,10	0,03
Wax and wax-like substances	None	None
Soap (quality test)	None	None

TOXIC SUBSTANCE CONTENT BY WEIGHT - mg/kg, not more than

Lead	0,1	0,066
Arsenic	0,1	< 0,063
Cadmium	0,05	0,0184
Mercury	0,03	< 0,001
Copper	0,5	0,138
Iron	5,0	2,340
Zinc	5,0	2,123

MYCOTOXIN CONTENT BY WEIGHT - µg/kg, not more than

Aflatoxin B1	0,005	< 0,001
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Zearalenone	1,0	< 0,04
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RESIDUAL PESTICIDES BY WEIGHT - mg/kg, not more than

HCH gamma isomer (hexachloran)	0,05	< 0,05
Heptachlor	None allowed	None
DDT	0,1	< 0,05

RADIONUCLIDE CONTENT - Bq/kg

Caesium-137 (Cs-137)	< 100	10,7
Strontium-90 (Sr-90)	< 30	6,53
Trans fatty acids %	< 1,0	0,038
Benzo(a)pyrene content <i>by weight</i> µg/kg	< 2,0	0,7
Genetically modified organisms	< 0,9	None detected

FATTY ACID COMPOSITION - %

C 16:0	3,0 – 10,0	6,9
C 18:0	1,0 – 10,0	3,9
C 18:1	14,0 – 35,0	27,5
C 18:2	50,0 – 75,0	60,2
C 20:0	< 1,5	0,30
C 22:0	< 1,5	0,80

DENSITY - g/cm

Density at 20°C	0,917 – 0,927	0,92
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