

## TECHNICAL SPECIFICATIONS: Refined sunflower oil

- **PRODUCT TRADE NAME:** Refined sunflower oil
- **TRADEMARK:** DOCILE
- **COMPOSITION (INGREDIENTS) :** Refined and fried sunflower oil and dimethylpolysiloxane (E-900).
- **DESCRIPTION:** Refined oil obtained from sunflower seeds (*Helianthus annuus*). The oil is white, cooled, and deodorized.
- **REGULATORY REFERENCE:** The product quality complies with the requirements of the DSTU 4492:2017 standard "Sunflower Oil. Specifications" (Ukrainian national standard).
- **ORGANOLAPTIC CHARACTERISTICS:**
  - Appearance: clean and transparent at a temperature of 216°C
  - Color: pale yellow
  - Odor and flavor: normal, with its own characteristic aromas, without signs of rancidity.

### • ORGANOLAPTIC CHARACTERISTICS:

#### PHYSICOCHEMICAL PROPERTIES:

Test Element Name and Unit	Reference Value	Tested Value
• Color Index, mg of iodine, no more than	10	3
• Acid Value, mg KOH/g, no more than	0.50	0.9...0.14
• Peroxide Value, 1/2 O mmol/kg, no more than	10	0.56...0.58
• Phosphoric Substances Content in terms of stearoleic acid, % by weight, no more than	None	None
• Non-Fat Impurities Content, % by weight, no more than	None	None
• Moisture and Volatile Substances Content, % by weight, no more than	0.10	0.20...0.03
• Waxes and Wax-like Substances	None	None
• Soap (Quality Test)	None	None
• Antioxidants (E20/E321), g/100g	0.05	0.02
• Antifoaming Agent (E900), mg/kg, no more than	10	5-8

\*This is a reference product specification. The actual tested values may vary slightly from batch to batch. The actual tested values for each individual shipment of this product will be indicated in the respective quality documents issued for that shipment at the time of dispatch.

## HEAVY METALS, by weight, mg/kg, no more than:

Name	Reference Value	Tested Value
Lead (Pb)	0.10	67
Cadmium (Cd)	0.05	0.0183
Arsenic (As)	0.10	NOT DETECTED
Mercury (Hg)	0.03	NOT DETECTED
Copper (Cu)	0.50	248
Zinc (Zn)	5.00	2.917
Iron (Fe)	5.00	1.321

## PESTICIDE RESIDUES, in weight, mg/kg, no more than:

Name	Reference Value	Tested Value
DDT	0.10	<0.05
Hexachlorane (HCCH, hexachlorocyclohexane)	0.05	<0.05
Heptachlor	0	NOT DETECTED

## MYCOTOXINES, in weight, mg/kg, no more than:

Name	Reference Value	Tested Value
Aflatoxin	5	<0.001
Zearalenon	1.0	< 0.04

## RADIONUCLIDES, bq/kg:

Name	Reference Value	Tested Value
Cesium (Cs-137)	<100	8.21
Strontium (Sr-90)	<30	3.60

## OTHERS:

Name	Reference Value	Tested Value
Trans fatty acids	<1.0	38
Content of benzo(a)pyrene by weight	<2.0	0.5

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## GENETICALLY MODIFIED ORGANISMS (GMOs)

Name	Reference Value	Tested Value
35S + FMV promotor target sequence (PCR REAL-TIME)	<0.1%	NOT DETECTED
NOS-terminator target sequence (PCR Real-Time)	<0.1%	NOT DETECTED

## FATTY ACID COMPOSITION:

Name and Unit of Measurement for Test Elements	Reference Value	Tested Value
C 16:0	5.0 - 7.6	6.9
C 18:0	2.7 - 6.5	3.9
C 18:1	14.0 - 39.4	27.5
C 18:2	48.3 - 74.0	60.2
C 20:0	0.1 - 0.5	0.30
C 22:0	0.3 - 1.5	0.80

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- **STORAGE:** Recommended storage temperature: 25°C
- **CONSUMERS:** Special catering / high yield
- **PACKAGING:**
  - 1L PET bottle
  - 5L PET bottle
  - 25L plastic bottle