Reference Product Specification

	General Inform	nation	
Product name:	Sunflower Fatty Acids		
Product grade:	GMP+ FSA assured, Nu	mber: 2.217	
Product description:	Fatty acids obtained from	n sunflower oil soapstock, feed grade	
Intended purpose/application:	For further processing in	n feed supplement production	
Regulatory reference:	Specification.	acids obtained from light oil soap stock. Standard	
	-	d European Council (EC) Regulation No. 767/2009	
Certification compliance: GMP+ B1 (feed-grade) Physical characteristics			
A	-	teristics	
Appearance:	opaque oily liquid		
Color, at 20°C:	brown		
Odor:	characteristic of fatty acids		
Impurities and foreign matter:	<u>Foreign matter</u> : Glass	not allowed	
	Packaging material	not allowed	
	Wood	not allowed	
	Plastic	not allowed	
	Sand	not allowed	
	Stones Metal	not allowed not allowed	
	Chemical charac		
Oleic acid decomposition depth, % (not less than):		55.0	
Total fat content, % by weight (not less tha	,	97.0	
Moisture and volatiles content, % by weight (not more than):		2.0	
Linoleic acid content, % by weight (not less than):		50.0	
Mineral acids:		none allowed	
Unsaponifiable matter, % (not more than):		1.5	
Insoluble impurities, % (not more than):		1.0	
Safety Indicators			
Mercury (Hg), mg/kg (not more than): 0.05			
Cadmium (Cd), mg/kg (not more than):		0.30	
Arsenic (As), mg/kg (not more than):		1.00	
Lead (Pb), mg/kg (not more than):		3.0	
Copper (Cu), mg/kg (not more than):		3.0	
Zinc (Zn), mg/kg (not more than)		5.0	
B_1 Aflatoxin, mg/kg (not more than):		0.02	
Dioxin, ng (not more than): (WHO-PCDD/F-TEQ/ kg)		0.5	
Dioxin-like, ng (not more than): (WHO-PCDD/F-TEQ/kg)		0.5	
		10.0	
Non-dioxin-like (PCB28, PCB52, PCB101,PCB138, PCB153, PCB180), µg/kg (not more than):			
Sum of dioxins and dioxin-like PCBs [WHO-PCDD/F-PCB-TEQ/kg (2005)], ng (not more than):		1.0	
Zearalenon, mg/kg (not more than):		0.1	
Polycyclic Aromatic Hydrocarbons (PAH4), µg/kg NMT:		160	
Hydrocarbons (C10-C40), mg/kg NMT:		1,000	
Radionuclides:			
Cs-137 specific activity, Bq/kg (not more than):		600	
Sr-90 specific activity, Bq/kg (not more than):		100	

Manufacturer:

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Microbiological characteristics		
Enterobacteria:	none allowed	
Salmonellae:	none allowed	
Mold or yeast fungi:	none allowed	
Packaging, storage and shipping		
Storage conditions:	Acid-proof tanks equipped with a heat-proof protective jacket	
Transportation conditions:	To be transported inside dry, clean tanks without foreign odors with tightly closed hatches and in accordance with GMP+	
Safety labeling:	Shipping container labeling as per GOST 14191-96 (cargo labeling). The label is to include the "Protect from moisture" handling precaution as per GOST 14492	
Useful life	3 (three) months from manufacture date.	
Packaging:	none, bulk liquid	
Shipping options:	tank trucks	

This is a reference product specification, provided for informational purposes only. To the best of our knowledge, all data, parameter values, and other data are correct and true, however, no guarantees can be given to that effect. The actual product specifications are subject to change without notice and can only be bindingly defined in a contractual agreement.

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