Reference Product Specification

	General Inform	nation
Product name:	Sunflower Meal	
Product grade:	High-protein, pelletized	
Product description:	General-purpose high-protein sunflower meal, pelletized	
Intended purpose/application:	Primary animal or poultry formula feed ingredient	
Regulatory reference:	DSTU 4638:2006 Sunflower Meal. Standard Specification	
Certification compliance:	GMP+ B1 (feed-grade)	
Physical characteristics		
Appearance: solid cylinder-shaped pellets		
Color, at 20°C:	gray to greenish-gray or	brownish-gray
Odor:		er meal (as per DSTU 4638:2006)
Pellet diameter, mm:	8.0	
Pellet length, mm:	12.0	
Fines passing a 2-mm sieve, % by weight:	0.4	
Impurities and foreign matter:	Foreign matter:	
	Glass	not allowed
	Packaging material	not allowed
	Wood	not allowed
	Plastic	not allowed
	Sand	not allowed
	Stones	not allowed
	Metal	not allowed
Chemical characteristics		
Moisture and volatiles content, % by weight (not more than):		10.2
10% HCI-insoluble ash at bone-dry humidity (BDH), % by weight:		0.63
Total fat and extractive substances at BDH,	% by weight:	0.70
Residual solvents, % by weight:		0.05
Nutritional characteristics		
Raw protein at BDH, %:		40.03
Raw cellulose at BDH, % by weight:		20.06
Soluble proteins out of total protein content	, % by weight:	70.74
Total nutrient value on dry basis:		1.12
Safety Indicators		
Mercury (Hg), mg/kg (not more than):		0.02
Cadmium (Cd), mg/kg (not more than):		0.40
Arsenic (As), mg/kg (not more than):		0.50
Lead (Pb), mg/kg (not more than):		0.50
B_1 Aflatoxin, mg/kg (not more than):		0.05
Zearalenon, mg/kg (not more than):		0.1
Radionuclides:		
Cs-137 specific activity, Bq/kg (not more the	an):	600
Sr-90 specific activity, Bq/kg (not more than	ı):	100
Microbiological characteristics		
Enterobacteria:	none allowed	
Salmonellae:	none allowed	
Mold or yeast fungi:	none allowed	
Packaging, storage and shipping		
Storage conditions: to be stored in dry, pest-free indoor areas, protected from moisture		
Transportation conditions:	to be protected from moisture while in transit	
Storage life	3 (three) months from manufacture date	
Packaging:	none, loose bulk	
Shipping options: railroad hopper wagons; dump semi-trailers		

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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