ALTAR
ALINA CHOWANSKA

PILAM 1 & 2 E 1420

Valid from: 2013-03-07

Country of origin	POLAND				
Product description	Pilam is produced by the esterification of starch with acetic anhydride. In technology the product acts as a stabilizer, thickener, emulsifier, binder, and the carrier. Pilam 1 differs from Pilam 2 the content of acetyl groups.				
Product properties	Pilam has a high stability of rheological parameters in different environments and conditions of the process. It has a higher solubility and water-binding capacity compared to native potato starch. It also has a lower gelatinization temperature, and the resulting pastes are transparent and stable at room temperature and more resistant to retrogradation processes.				
Application	It is recommended for the production of noodles, soups, confectionery fillings, frozen fruit cakes, flour confectionery and bakery products, powdered concentrates, flavoured yoghurts, protective coating of dried vegetables, sauces, marinades, desserts, cheese and confectionery. It is also used as a binding agent in feed for fish.				
Physico-chemical requirements	⍰ Appearance and odour: loose powder with typical for potato starch odour with a slightly perceptible smell of acetic				
	⍰ Taste: typical for potato starch, free from foreign taste				
	⍰ Colour in CIE, L system: not less than 91				
	⍰ Macroscopic impurities: not more than 96 pcs/1dm2				
	⍰ Moisture: not more than 20 %				
	⍰ pH: 4,0 – 6,5				
	⍰ SO2 content: not more than 10 mg/kg				
	⍰ Acetyl group content 1: from 1,2 – 1,5 % 2: more than 1,5 %				
	Ash content: not more than 1,0 % in d.s.				
	Solubility in water: completely soluble in temp.< 70 ºC				
	Final viscosity (4% gel, 25°C, 700cmg): min 600 ºBu				
	"Harmful metals content: arsenic (As) – not more than: 0,50 mg/kg lead (Pb) – not more than: 0,50 mg/kg mercury (Hg) – not more than: 0,03 mg/kg cadmium (Cd) – not more than: 0,10 mg/kg"				
Microbiological requirements	Type of microorganisms	n*	c*	Limit in 1 g	
				m*	M*
	Aerobic mesophilic organisms	5	2	10 000	100 000
	Coliforms	5	2	0 (0,1g)	0 (0,01g)
	Salmonella	5	0	0 (25g)	-
	Staphylococcus aureu	5	0	0 (0,1g)	-
	Moulds and Yeasts	5	2	500	1000
Allergens	Product is free from allergens.				
GMO	The product is not genetically modified, and has not been produced from genetically modified raw materials.				
Pesticides	Pesticides are marked in potato starch that is a raw material in production of Pilam, and in which there is no residue of the tested active substances of plant protection higher than acceptable.				
Packing	Pilam is packed in a valve paper bag of a 25 kg net. Other types of packing allowed by the NIH for packaging foods are possible after agreement with recipient.				

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Labelling	Packings are marked by label or overprint including following data: - name and address of the producer, - labelling of the product, - reference standard, - net weight in kg, - date of production, - batch No. (same as the date of production), - bag No., - shelf life.
Storage conditions	Recommended relative moisture of air: 60 – 75 %, temperature should not exceed 20°C.
Shelf life	It should meet the requirements for a period of at least 24 months from date of manufacture, under appropriate conditions of packaging, storage and transport.
Reference standard	ZN-13/ZETPEZET-05-13 and the currently applicable regulations of EU law and national law.

*M – accepted threshold value above which the results are disqualifying

*m – value equal to or below which all results are considered satisfactory

* n – number of samples in the batch

*c – number of samples from a batch giving the result between m and M

The information contained in the Product Specifications represents the best of our knowledge and experience of using a product and are not exhaustive. We have provided general guidelines of properties, usage and application of the product. This specification does not relieve user from compliance with all applicable laws, administrative regulations and health and safety.