



MILK-O[®]-LYS

Product Data Sheet

Date of issue: 19 September 2022

Powder lysozyme for use in the food industry

Description: MILK-O[®]-LYS is a powder lysozyme preparation for use in the dairy, meat or wine industry. In dairy applications, lysozyme prevents Clostridia-related late blowing of cheese during ripening. Clostridia bacteria are particularly living in the milk when using silage as cow feed. MILK-O[®]-LYS is a natural product that has been manufactured through an extraction process from hens' egg white. The product can be used in all hard-, semi-hard and semi-soft cheese types. MILK-O[®]-LYS has proven to be especially effective as alternative to bacto-fugation treatments or as alternative to the use of sodium nitrate.

Properties:

Enzyme: Lysozyme	IUBMB: 3.2.1.17
Activity: 35 000 FIP units/g	Form: powder
Water content: <6%	Colour: white

Colour and appearance may vary from batch to batch. Colour intensity is not an indication of enzyme activity.

Application: MILK-O[®]-LYS has a wide scope of application in the dairy, meat, and wine industry.

Conditions of use: MILK-O[®]-LYS can be simply dispersed in water and then added directly to the cheese milk. Mix via the filling of the vat with the milk. Efficiency of MILK-O[®]-LYS may depend on the contamination level and storage conditions of the cheese.

Application	Dosage	Conditions
Hard and semi-hard cheeses	15-25 g / 1000 L milk	Optional: lower the dosage rate with lower contamination levels
Semi-soft cheeses	1020 g / 1000 L milk	Optional: lower dosage when used with NaNO ₃ /bacto-fugation

pH for optimal lysozyme activity is 5.0-5.2. Lysozyme is destroyed if the milk is heated above 70 °C, with 3% maximum activity remaining when heated to 100 °C for a few seconds.

GM Status: The product and its constituent enzymes are not genetically modified. Enzyme proteins are produced from hen's egg white.

Composition: MILK-O[®]-LYS is stabilised with sodium chloride.

Packaging and storage: The product is available in 500g food grade HDPE boxes. When stored unopened in a cool and dry place, activity is preserved for 24 months.

Safety and caution: Enzyme products need to be handled with care. Please consult the separately available Safety Data Sheet for further information.



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Compliance and legal: Our enzyme products are used as processing aids in the food manufacturing process and are thus free from any labelling provisions in the European Union. The product does not fall within the scope of EU regulations (EC) 1829/2003 and (EC) 1830/2003 on genetically modified food and feed.

The product is manufactured to comply with recommended purity specifications given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA), and conforms with the recommended specifications of the Food Chemical Codex for food enzymes.

The product is classified in the EU numbering system for food additives as E1105 and its use and labelling are regulated in various EU Directives and/or specific product standards.

Purity criteria:	Total plate count	≤ 50000 CFU per g
	Coliforms	≤ 30 CFU per g
	<i>Escherichia coli</i>	absent in 25 g
	Salmonella	absent in 25 g
	Staphylococcus aureus	absent in 1 g
	Heavy Metals (as Pb)	< 30 ppm
	Lead	< 5 ppm
	Arsenic	< 3 ppm
	Cadmium	< 0.5 ppm
	Mercury	< 0.5 ppm
	Sodium chloride	< 8%

Special diet information:	Kosher:	certified
	Halal:	certified
	Vegan/Vegetarian:	the product is of animal origin

Certification: WeissBioTech GmbH has a certified quality management system according to ISO 9001:2015 and a certified Food Safety Management System according to FSSC 22000 incl. HACCP, which are reviewed in regular audits.

Made by WeissBioTech GmbH, Germany

To the best of our knowledge, the information contained herein is accurate and complete. However, nothing herein contained shall be construed to imply any warranty or guarantee.

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