



# NATUZYM® CCL

## Product Data Sheet

Date of issue: 24 September 2022

### Pectinase for lemon juice clarification

**Description:** NATUZYM® CCL is an acid stable pectinase from a selected classical strain of *Aspergillus niger*. NATUZYM® CCL is active at low pH and has been developed for lemon or lime juice depectinisation. The product contains different pectinase activities, mainly pectin lyase, which hydrolyse the pectin colloidal complex from albedo in lemon or lime juice, decrease the viscosity, and speed up the clarification and concentration of the juice.

**Properties:** Enzyme: pectin lyase IUBMB: 4.2.2.10  
Activity: >650 PL units/g Form: liquid  
Density: 1.10–1.25 g/ml Colour: brown

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

**Application:** NATUZYM® CCL is an acid stable pectinase that has been specially developed for lemon juice clarification.

**Conditions of use:** NATUZYM® CCL is a pectinase working at low pH in citrus juices. It is added into the clarification tank after pasteurisation and cooling of the juice.

Application	Dosage	Recommendation
Lemon juice	8-10 g/hl	1-2 h at 30 °C
	7-12 g/hl	12 h at ambient temperature
Lime juice	7-12 g/hl	12 h at ambient temperature

**GM Status:** The product and its constituent enzymes are not genetically modified. Enzyme proteins are produced by fermentation of classical microorganisms, which are removed and not present in the final product. Only agricultural raw materials of non-genetically modified (non-GM) origin are used for the fermentation process and in the final formulation.

**Composition:** NATUZYM® CCL is stabilised with glycerol.

**Packaging and storage:** NATUZYM® CCL is available in 25 kg polyethylene drums or IBCs. The product is best stored in the original and unopened packaging under refrigerated conditions (4–8 °C) in order to retain maximum activity during storage. Under optimum conditions shelf life is 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.

<b>Purity criteria:</b>	Total plate count	< 50 000 CFU per g
	Total Coliforms	< 30 CFU per g
	Yeast and moulds	< 30 CFU per g
	Salmonella	absent in 25 g
	Escherichia coli	absent in 25 g
	<b>Heavy Metals (as Pb)</b>	< 30 ppm
	Lead	< 5 ppm
	Arsenic	< 3 ppm
	Cadmium	< 0.5 ppm
	Mercury	< 0.5 ppm
<b>Special diet information:</b>	Kosher:	Certified
	Halal:	Certified
	Vegan/Vegetarian:	enzyme product or any constituents are not 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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