CULTURES DIVISION
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PRODUCT DESCRIPTION - PD 206077-12.0EN

Material no. 13541063

HOLDBAC™ LC LYO 100 DCU

HOLDBAC™ Protective Cultures

Description

Freeze-dried starter culture
Licenser: Valio, Finland

Thermophilic single strain culture

Usage levels

Product	Dose
semi-hard cheese	5 - 20 DCU / 100 l of vat milk
Emmental	5 - 20 DCU / 100 l of vat milk

The quantities of inoculation indicated result from experiences. They have to be adjusted to bacterial content and technology. We cannot guarantee the inhibiting effect of the culture by all means. Supplement cultures may be required depending on technology, fat content and product properties desired.

We do not accept any liability in case of undue application.

Directions for use

Disinfect opening area with ethanol (approx. 70 %) before opening package. Cut open and add culture to process milk under aseptic conditions.

Composition

Lactobacillus rhamnosus

Properties

Homofermentative protective culture with very slow acidification. HOLDBAC™ LC LYO 100 DCU forms lactic acid of the L(+) type and decomposes small quantities of citrate to diacetyl and acetoin. It is very resistant to salt.

As proved, this culture inhibits growth and activity of undesired microorganisms in a biological way (depending on strain and species), e.g. leuconostoc, heterofermentative lactobacilli and enterococci.

Microbiological specifications

Microbiological quality control - standard values and methods [UM-]

Examination of culture:

Cell count	>= 2.0E+10 / DCU [UM-009]
non-lactic acid bacteria	< 100 / g [UM-030]
enterobacteriaceae	< 1 / g [UM-031]
yeasts and moulds	< 10 / g [UM-017]
enterococci	< 10 / g [UM-033]
Staphylococcus aureus	< 1 / g [UM-034]
clostridia spores	< 10 / g [UM-037]
Bacillus cereus*	< 10 / g [UM-041]
salmonellae*	neg. / 25 g [UM-038]
listeria*	neg. / 25 g [UM-039]

* not necessarily examined for each lot, but ensured by HACCP system as well as by plant and personnel hygiene.

Storage

8 months from date of production at <= -18 °C

Packaging

PE, PET, Al laminated foil

Purity and legal status

HOLDBAC™ LC LYO 100 DCU meets the specification laid down by the EU legislation.

Label food regulations should always be consulted concerning the status of this product, as legislation regarding its use in food may vary from country to country.

Safety and handling

MSDS is available on request.

The information contained in this publication is based on our own research and development work and is to the best of our knowledge reliable. Users should, however, conduct their own tests to determine the suitability of our products for their own specific purposes and the legal status for their intended use of the product. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for the infringement of any patents.

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Kosher status

Dairy Kosher

Halal status

certified by Islamic Food Council of Europe

GMO status

HOLDBAC™ LC LYO 100 DCU does not consist of, nor contains, nor is produced from genetically modified organisms according to the definitions of Regulation (EC) 1829/2003 and Regulation (EC) 1830/2003 of the European Parliament and the Council of 22 September 2003.

Allergens

Below table indicates the presence of the following allergens and products thereof:

Yes	No	Allergens	Description of components
	X	wheat	
	X	other cereals containing gluten	
	X	crustacean shellfish	
	X	eggs	
	X	fish	
	X	peanuts	
	X	soybeans	
X		milk (including lactose)	used as fermentation nutrient*
	X	nuts	
	X	celery	
	X	mustard	
	X	sesame seeds	
	X	sulphur dioxide and sulphits (> 10 mg/kg)	
	X	lupin	
	X	molluscs	

* used as fermentation nutrient. Danisco has determined that fermentation nutrients are outside the scope of US and EU food allergen labelling requirements.
Local regulation has always to be consulted as allergen labelling requirements may vary from country to country.

Additional information

The values indicated in this document correspond to results from standardized laboratory tests. They should be considered as guidelines. In practice, other values are expected depending on the type of product and technology. Due to advances in technology and continuous product improvement it may be necessary to change standard values in the future.

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