

## PRODUCT DESCRIPTION - PD 206078-20.0EN

Material no. 13541065

### HOLDBAC® LC LYO 500 DCU

HOLDBAC® Protective Cultures

#### Description

Freeze-dried culture for direct inoculation

Thermophilic single strain culture

#### Usage levels

Product	Dose
semi-hard cheese	5 - 20 DCU / 100 l of milk
Emmental	5 - 20 DCU / 100 l of milk
ferm. milk prod.	10 - 20 DCU / 100 l of milk*

(e. g. yoghurt, quarg etc.)

\* depending on technology (e.g. incubation temperature, amount of inoculation)

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 500 DCU forms lactic acid of the L(+) type and decomposes small quantities of citrate to diacetyl and acetoin. It is resistant to salt.

HOLDBAC® LC LYO 500 DCU is added together with acidifying cultures and can improve the texture and/or flavour of fermented product.

HOLDBAC® LC LYO 500 DCU has been shown to maintain product freshness throughout shelf-life and contribute to protect against some off-flavour development during storage and transportation.

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

heterofermentative lactobacilli, clostridia and yeasts & molds.

#### Microbiological specifications

Microbiological quality control - standard values and methods

Cell count	$\geq 2.0E+10$ CFU / DCU
Non-lactic acid bacteria	< 500 CFU / g
Enterobacteriaceae	< 10 CFU / g
Yeasts and Moulds	< 10 CFU / g
Enterococci	< 100 CFU / g
Clostridia Spores	< 10 CFU / g
Staphylococcus positive coagulase	< 10 CFU / g
Salmonella spp.	neg. / 25 g
Listeria monocytogenes	neg. / 25 g

Analytical methods available upon request

#### Storage

18 months from date of production at  $\leq -18$  °C.

#### Packaging

PE, PET, Al laminated foil

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#### Purity and legal status

HOLDBAC® LC LYO 500 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.

#### Kosher status

Dairy Kosher

#### Halal status

Halal certificate available on request

#### GMO status

HOLDBAC® LC LYO 500 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 (as added component) 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)	
	X	nuts	
	X	celery	
	X	mustard	
	X	sesame seeds	
	X	sulphur dioxide and sulphites (> 10 mg/kg)	
	X	lupin	
	X	molluscs	

Local regulation has always to be consulted as allergen labelling requirements may vary from country to country.

#### Additional information

HOLDBAC® cultures are designed, tested and sold based on their protective properties. Customers who use these cultures for other applications do so under their responsibility.

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.

HOLDBAC® LC LYO 500 DCU is used as an additional culture together with the fermentation culture.