

## PRODUCT DESCRIPTION - PD 206589-15.1EN

Material no. 13230032

### CHOOZIT™ 220 FRO 500 DCU

CHOOZIT™ Cheese Cultures

#### Description

Concentrated, deep-frozen culture in pellet form for direct inoculation of process milk

Undefined, mesophilic multiple-strain-O-culture

#### Usage levels

Product	Dose
sour cream and crème fraîche	10 - 20 DCU / 100 l
set milk	10 - 20 DCU / 100 l
fresh cheese	5 - 15 DCU / 100 l
soft cheese	10 - 20 DCU / 100 l
semi-hard cheese	10 - 15 DCU / 100 l
hard cheese	10 - 25 DCU / 100 l

The quantities of inoculation indicated should be considered as guidelines. 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

Take package from freezer just before use. Disinfect opening area with ethanol (approx. 70 %) before opening package. Pouch is to be opened along the tear-open notch parallel to the top edge. Add frozen culture directly to the process milk under aseptic conditions. It has to be considered that the whole content of the pouch has to be inoculated per propagation in order to guarantee constant product quality.

#### Composition

Lactococcus lactis subsp. lactis  
Lactococcus lactis subsp. cremoris

#### Properties

Medium fast acidifying mesophilic starter culture without CO<sub>2</sub> and aroma formation due to the lack of citrate fermentation. This culture forms lactic acid of the L(+) type. Because of its complex composition, CHOOZIT™ 220 FRO 500 DCU is very resistant against phages.

Compared to CHOOZIT™ 230 and CHOOZIT™ 240, it acidifies to a less low pH and it is slightly more sensitive to higher scalding temperatures.

#### Physical/chemical specifications

Direct inoculation:

Test medium:

reconstituted skim milk with 9 % of dry matter heated at 95 ± 3 °C for 30 min

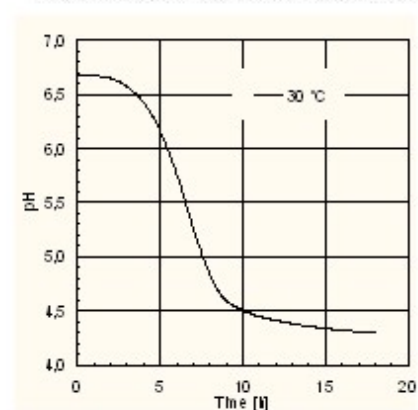
Fermentation:

Inoculation amount: 10 DCU / 100 l (1 pouch / 5,000 l) inoculation and incubation temperature: 30 °C

activity [pH]  
after 7 h / 30 °C

≤ 6.00

Standard acidification curve



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#### Microbiological specifications

Microbiological quality control - standard values and methods

Non-lactic acid bacteria	< 500 CFU / ml
Enterobacteriaceae	< 1 CFU / ml
Yeasts and Moulds	< 1 CFU / ml
Enterococci	< 10 CFU / ml
Clostridia Spores	< 10 CFU / ml
Coagulase-positive staphylococci	< 1 CFU / ml
Salmonella spp.	neg. / 25 ml
Listeria monocytogenes	neg. / 25 ml

Analytical methods available upon request

#### Storage

12 months from date of production at  $\leq -45$  °C

#### Packaging

PE pouch

#### Purity and legal status

CHOOZIT™ 220 FRO 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

#### 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 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

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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#### **GMO status**

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CHOOZIT™ 220 FRO 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 of the Council of 22 September 2003.