

PRODUCT DESCRIPTION - PD 206750-15.0EN

Material no. 50303

GEO17 LYO 10 D

CHOOZIT® Cheese Cultures

Description

A key agent in the ripening of cheese, *Geotrichum* implants very rapidly on the cheese surface (first) and has a synergistic effect on the implantation (with the yeasts) of *Penicillium candidum*.

The culture is a freeze-dried powder.

Usage levels

Product	
Brie type	2 doses / 1,000 l of milk
Camembert type	2 doses / 1,000 l of milk
Ultra filtrated cheese	1 - 2 doses / 1,000 l of milk
Blue veined cheese with white surface	1 - 2 doses / 1,000 l of milk

The quantities of inoculation indicated should be considered as guidelines. Additional amount of cultures may be required depending on technology and product properties desired. Users of this product shall conduct their own risk assessment to determine (i) the suitability of the product based on such user's process parameters and (ii) whether the product fits for the purpose of the intended use.

IFF does not accept any liability in these respects.

Directions for use

Incorporation in the milk accelerates the activity of the *Geotrichum*. Freeze-dried presentations can be inoculated directly into the milk, without rehydration. However, freeze-dried *Geotrichum* must be re-activated (16 hours at + 4°C) before use in a spray/mist or in the reserve mix in the ripening room.

Composition

Geotrichum candidum
carrier: dextrose

Properties

GEO17 LYO 10 D is a mould-like form.

It is better to use GEO17 LYO 10 D in association with *Penicillium Candidum*.

Trend to reduce the thickness of cheese rind is to increase the dosage of GEO17 LYO 10 D to the detriment of *Penicillium Candidum* dosage.

Rapid de-acidification of curd by metabolism of lactic acid due to rapid growth (24-48 hours) of a selected, easily controlled surface flora. Enzymatic activity is weak compared to *Penicillium candidum*, but aroma and flavour development is excellent. Enhances the final appearance of the cheese : less dense 'felt' of the *Penicillium* surface flora, reduced proteolysis (less ammonia) and contaminant control.

Physical/chemical specifications

White to brown colored free-flowing product with typical odor of fermented product, without any foreign material as per process-defined risk mitigation, color can vary from batch to batch

Microbiological specifications

Microbiological quality control - standard values

Cell count	8.0E+07 CFU / dose
Tolerance:	Min. 7.2E+7 CFU / dose
Aerobic contaminant	< 100 CFU/g
Enterobacteriaceae	< 10 CFU/g
Yeasts and Foreign	< 10 CFU/g
Moulds	
Enterococci	< 100 CFU/g
Clostridia spores	< 10 CFU/g
Coagulase-positive staphylococci	< 10 CFU/g
<i>Listeria monocytogenes</i>	neg. / 25 g
<i>Salmonella</i> spp.	neg. / 25 g

Analytical methods available upon request

PRODUCT DESCRIPTION - PD 206750-15.0EN

Material no. 50303

GEO17 LYO 10 D

CHOOZIT® Cheese Cultures

Storage

18 months from date of production at $\leq -18\text{ °C}$
 6 months from shipment date at $+4\text{ °C}$ without
 exceeding shelf life indicated on label.

Packaging

These freeze-dried cultures are packaged in sachets.
 The following information is printed on each sachet:
 Product name, dosage, batch no and shelf life at
 -18 °C .

Quantity

Unit pack: box of 50 sachets

Purity and legal status

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

Safety and handling

SDS is available on request.

Kosher status

Kosher certificate available on request.

Halal status

Halal certificate available on request

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 ($> 10\text{ mg/kg}$)	
	X	lupin	
	X	molluscs	

Local regulation has always to be reviewed and checked by the
 user of this product as allergen labelling requirements may vary
 between countries.

Additional information

The values indicated in this document correspond to
 results from standardized laboratory tests conducted
 by IFF. In practice, other values can be expected
 depending on the test type and technology used. Due
 to advances in testing capabilities and continuous
 product improvement it may be necessary to change
 standard values in the future.

GEO17 LYO 10 D is manufactured in compliance with
 applicable global food safety standards. The third
 party certificate of the manufacturing site is available
 upon request.

PRODUCT DESCRIPTION - PD 206750-15.0EN

Material no. 50303

GEO17 LYO 10 D

CHOOZIT® Cheese Cultures

GMO status

GEO17 LYO 10 D does neither consist of GMO, contain GMO nor is produced from GMO according to the definitions of EU Regulation 1829/2003 and 1830/2003.

Country of origin

France