

PRODUCT DESCRIPTION - PD 207497-3.0EN

Material no. 50296

GEO 13 LYO 2 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* and on flora such as *Brevibacterium linens* that require a neutral environment.

Usage levels

Product	Dose
goat milk cheese	1 - 2 doses / 1,000 l of milk
Camembert type	2 doses / 1,000 l of milk
Brie type	2 doses / 1,000 l of milk
Ripened speciality cheese	2 doses / 1,000 l of milk

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

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

Composition

Geotrichum candidum

Properties

- GEO 13 LYO 2 D is an intermediate yeast-like/mould-like form.

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 implantation of *Corynebacteria* by neutralising the acid and producing growth stimulants. Enhances the final appearance of the cheese : less dense 'felt' of the *Penicillium* surface flora, reduced proteolysis (less ammonia) and contaminant control.

Microbiological specifications

Microbiological quality control - standard values and methods

Cell count 8.0E+07 CFU / dose
Tolerance: from 7.2E+7 to 16.0E+7 CFU

Enterobacteria	< 10 / g [8]
Enterococci	< 10 / g [2]
Staphylococci coagulase positive	< 10 / g [12]
Anaerobic sulphite reducing spores	< 10 / g [9]
Yeasts	< 10 / g [10]
Foreign moulds	< 10 / g [10]
Aerobic mesophilic total count	< 100 / g [11]
<i>Listeria monocytogenes</i>	neg. / 25 g [13]
<i>Salmonella</i>	neg. / 25 g [14]

[8] V08-054 Feb.1999 (reading 48 hours)

[2] Gelose bile esculine sodium azide / 48 h at 37 °C

[12] NF V08-057 Nov. 1994 part 1

[9] V08-061 Oct. 1996 (With Meat Leaver SR medium)

[10] V08-059 Nov. 1995

[11] V08-051 Feb. 1999 (PCA + 9 % milk + 0.02 % pimaricin)

[14] NF V08-052, May 1997

[13] NF V08-055, August 1997

Storage

18 months from date of production at ≤ -18 °C
6 months from shipment date at + 4°C

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Packaging

This freeze-dried culture is packed in bottles.
The following information is printed on each bottle:
product name, dosage, batch no, and shelf life at
-18°C.

Quantity

Unit pack: box of 20 bottles.

Purity and legal status

GEO 13 LYO 2 D 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.

Allergens

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

Yes	No	Allergens	Description of components
	X	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)	

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.

Additional information

ISO 9001 certified

GMO status

GEO 13 LYO 2 D 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.

For the raw materials having the potential of being
produced from genetically modified organisms, we
have obtained written information from our suppliers
stating that the raw materials are not produced from
genetically modified organisms according to the
definitions of the above mentioned EC Regulations.