Page 1 / 2

Valid from: December 29, 2016



PRODUCT DESCRIPTION - PD 207429-8.0EN

Material no. 66914

FR 13 LYO 10 D

CHOOZIT™ Cheese Cultures

Description

Aroma developing and coloring culture for cheese. The culture is a freeze-dried powder.

Usage levels

Minimum inoculation levels:

- 1 dose / 1000 litres of milk if inoculated before renneting,
- 2 doses / 1000 litres of milk (or 100 kg of cheese) using direct surface application.

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

Inoculation into milk before renneting. Dilution for use in spray: it is recommended to rehydrate the whole content of the pouch in a sterile isotonic solution (0.9% NaCl) enriched or not with 0.1% tryptone and or 0.1% glucose. This solution can be stored for a maximum of 16h at 5°C +/- 1°C. We do not accept any liability in case of undue application.

Composition

Brevibacterium linens

Properties

- Corynebacteria, especially Brevibacterium linens grow on cheese surface because of their aerobic characteristic and salt resistance. However, these microorganisms are acido-sensitive and need a pH higher than 5,50 in order to grow.
- Brevibacteria are responsible for orange colouring when developing on the surface of soft cheese with surface mould or smear flora.
- These strains play an important role during ripening because of their enzymatic activities and their ability to produce aroma compounds particularly sulphur aroma.
- When used in combination with Geotrichum or Penicillium, it allows to differenciate cheese types by a mixed surface.
- Control of contaminants
- Thanks to its rapid development FR 13 LYO 10 D gives sulphur aromatic profile in short time and reduces the number of ripening treatments. These specific properties allow productivity gains and improvement of quality. Moreover, the colouring obtained, light for FR 22 and strong for FR 13 is very stable.

Microbiological specifications

Microbiological quality control - standard values

Cell count 5.0E+10 CFU / dose Tolerance: from 3.8E+10 to 10.0E+10 **CFU** Aerobic contaminant < 100 CFU/g Enterobacteriaceae < 10 CFU/g Yeasts and Moulds < 10 CFU/g Enterococci < 100 CFU/g Clostridia spores < 10 CFU/g Coagulase-positive < 10 CFU/g staphylococci Listeria monocytogenes neg. / 25 g Salmonella spp. neg. / 25 g

Analytical methods available upon request

Storage

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

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.

Page 2 / 2

Valid from: December 29, 2016



PRODUCT DESCRIPTION - PD 207429-8.0EN

Material no. 66914

FR 13 LYO 10 D

CHOOZIT™ Cheese Cultures

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 20 sachets

Purity and legal status

FR 13 LYO 10 D complies with all EU food legislations.

Other local 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

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 of the following allergens and products thereof:

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

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

Additional information

ISO 9001 certified FSSC 22000 certified

GMO status

FR 13 LYO 10 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.