

# **Technical Data Sheet**

# Lactoferm Protek®

## **Description:**

Concentrated, lyophilized lactic starter culture for Direct Vat Inoculation (DVI ®), ideal to produce fermented milk, yoghurt, frozen yoghurt, fresh cheeses with probiotic properties.

The culture has low acidifying and fermenting activity, and for this reason it does not have any effects on the regular acidifying culture used.

Culture with probiotic properties composed by:

Lactobacillus casei subsp. Rhamnosus Micrococcus subsp.

The contribution of this bacteria inhibits the development of microside, increasing the shelf life of the products.

#### Dosage:

The culture is supplied in polyethylene/aluminium packet containing a single dose, for direct inoculation, relevant phage-specific rotations. Code, units, production batch and expiry date are indicated on each packet.

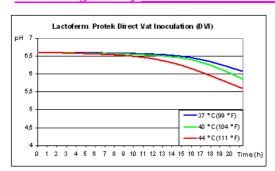
This culture must be used in association with Cheese-Tek cultures and Yogurt-Tek cultures.

Example	Doses
Fermented milk and Milk cream	10 - 15 U / 100 Kg of final product
Fresh cheese (e.g. Robiola, Feta, Stracchino)	1 - 3 U / 100 Lt of milk worked
Queso blanco - Primosale	1 – 2 U/ 100 Lt of milk

#### **Modality of Use:**

Take the culture from the freezer and use a sanitising agent to sanitise both the upper side of the packet and the tool used to open it. Inoculate culture directly in the milk treated, without any preliminary reactivation. Shake for some minutes to distribute culture evenly.

#### Fermenting activity:



Method: ISO 26323/IDF 213:2009	Substrate: Reconstituted skim milk 9,5% RSM
Heat treatment: 110°C x30'	Inoculation: 1 Ux100 It of milk

## **Culture characteristics:**

Optimum temperature for growth:	35 - 40 °C
Maximum working temperature:	44°C
Gas production:	-
Fermenting activity:	-
Viscosity:	-
Aroma:	-
Post acidification:	-
Flowing:	-

#### **Declaration of GMO and Allergens**

The product Protek does not contain any genetically modified microorganisms and is produced in compliance with Regulation (EP) No. 1829-1830/2003 and 1169/2011 as further amendments.

Allerges	Yes	No
Cereals containing gluten		Χ
Crustaceans		Χ
Eggs		Χ
Fish		Χ
Peanuts		Χ
Soy (GMO-free)		Χ
Milk	Χ	
Nuts		Χ
Celery		Χ
Mustard		Χ
Sesame seeds		Χ
Sulphur dioxide and		Χ
Sulphits (>10mg/kg)		
Lupins		Χ
Shellfish		Χ

# Microbiological controls:

## Microorganisms Method Results

 $>=3.0 \times 10^{10} \text{ CFU/g}$ Total cell count ISO 4833-1:2013 < 500 CFU/g ISO 13559/IDF153:2002 Non lactic acid bacteria Yeasts and moulds ISO 21527-2:2008 <10 CFU/g < 10 CFU / g Enterobatteriaceae ISO 21528-2:2004 ISO 4832:2006 Coliform bacteria <10 CFU/g Escherichia coli ISO 16649-2:2006 < 10 CFU/g Coagulase positive UNI ISO 6888-1:2003 <10 CFU/g staphylococci UNI ISO 6785:2004 Absence/25 g Salmonella spp. Listeria monocytogenes UNI EN ISO 11290-1:2005 Absence/25 a INT. MET. 012-1991 <100 CFU/g Enterococcus Heteroferm. lactobacilli INT. MET. 010-1991 <10 CFU/g

## Storage and Expiry:

If is stored in its original sealed packaging at a temperature of -18°C, the product keeps its characteristics unaltered for 24 months or for 6 months at +5°C. The product maintains its characteristics unchanged also for 10 days at room temperature.

