

# LyoPro<sup>®</sup> ALPINE

DVI Freeze-dried Dairy Cultures | Mesophilic & Thermophilic Alpine Culture

**Code-ing**  
Biotech Ingredients

## Technical Data Sheet

### Description:

A homofermentative culture blend that shows good fermentation performance and aromatic abilities related to the presence of *Lactobacillus helveticus* which has more proteolytic activity than other strains and produces a sweet nutty type flavor in cheeses that go through longer ripening periods. It is suggested for the production of semi-hard, hard and very hard cheeses.

### Composition:

*Streptococcus salivarius subsp. thermophilus*,  
*Lactococcus lactis subsp. lactis*, *Lactococcus lactis subsp. cremoris*,  
*Lactococcus lactis biovar. diacetylactis*, *Lactobacillus lactis*,  
*Lactobacillus helveticus*

**Carrier:** Dextrose - Maltodextrin

### Application:

Semi-hard, hard and very hard pressed Alpine cheeses including Gouda, Edam, Feta, Provolone, Cheddar, Pecorino, Emmental, Fontal and Caciocavallo.

### Properties:

Lactic acid producer culture with acidifying activity, good aroma production and medium proteolytic activity.  
Anti-phage rotation available

### DOSAGE:

Recommended dosage: 10 CXU / 26 Gallons (100 litres of milk)  
The quantities of inoculation indicated should be considered as guidelines. Additional cultures may be required depending on the technology, milk fermentability and product properties desired.

Package Size	Amount of Milk		
	Liters	Gallons	Pounds
CXU			
50	500	132	1100
100	1000	264	2200
200	2000	528	4400
500	5000	1321	11,000

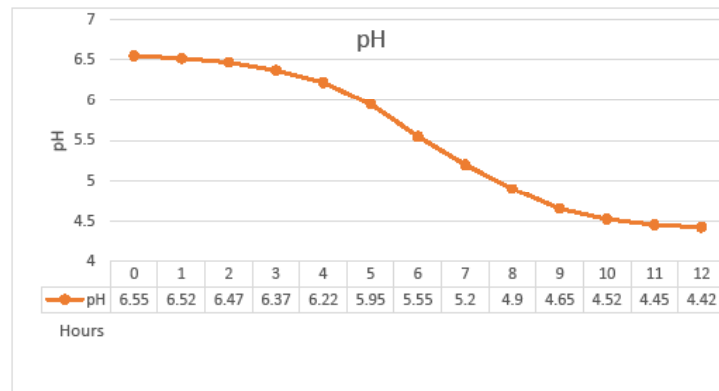
### Directions For Use:

Incubation temperature: 89.6-98.6°F (32-27°C)

If stored at negative temperature, keep the envelope at room temperature for 30 minutes before use. Add directly to the processed milk in the vat during agitation. More effective when there is no foam in the milk. Wait 30-40 minutes before adding coagulant.

### Activity Test:

Temperature	90°F (32°C)
Rehydration	10 Minutes
Test Medium	Reconstituted skim milk powder (10% solid) pasteurized at 194°F (90°C) for 30 minutes
Innoculation Rate	10 CXU / 26 Gallons (100 Litres)
Delta Δ pH in 6 hours	1.10 ± 0.10



The trial data must be regarded as an internal product verification and does not identify the technological curve obtainable on natural milk, where it is normally faster.

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## Microbiological Specifications:

Yeast and Moulds: < 100/g  
Enterobacteriaceae: < 10/g  
Staphylococcus aureus: < 10/g  
Salmonella spp: Absent in 25 g  
Listeria spp: Absent in 25 g

## Allergens:

Food Allergens*	Yes	No
Wheat		X
Other cereals containing gluten		X
Crustacean shellfish		X
Eggs		X
Fish		X
Peanuts		X
Soybeans		X
Milk	X	
Nuts		X
Celery		X
Mustard		X
Sesame seed		X
Sulphur dioxide and sulphites (>10 mg/Kg)		X
Lupin		X
Molluscs		X

## Packaging:

Packets are made with three layers of material (PET/AL/PE), for food in accordance with the overall migration test. First packaging as well as secondary packaging are free of pins and other hazardous foreign bodies.

## GMO STATUS: GMO-Free

The product does not consist of, not contains and is not produced from GMO according to EC Reg 1829/2003, Reg 1830/2003 of the European Parliament and of the Council of 22 Sep 2003.

**Safety Data Sheet:** Available upon request

**Country of Origin:** Italy

## Storage And Shelf Life:

20 months at -0.4°F (-18°C)

Refrigerated transport not required

**CERTIFICATIONS:** OK Kosher Certified



**Manufactured For:**  
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