

# LyoPro<sup>®</sup> TPF

DVI Freeze-dried Dairy Cultures | Thermophilic Culture for Pasta Filata

**Code<sup>+</sup>-ing**  
Biotech Ingredients

## Technical Data Sheet

### Description:

A homofermentative thermophilic single strain of *Streptococcus Salivarius subsp. thermophilus* that is suggested for the production of pasta filata for cow and buffalo mozzarella. Its characteristics include; no proteolytic activity and a slow fermentation activity when it's close to the pH for stretching. This provides a more standardized product and gives more stability during shelf-life. When combined with *Lactobacillus delbrueckii subsp. bulgaricus* or *Lactococcus lactobacillus helveticus* it can also be used for the production of pizza cheese as these strains reduce browning problems and improve the melting performance.

### Composition:

*Streptococcus salivarius subsp. thermophilus*,

**Carrier:** Dextrose - Maltodextrin

### Application:

Mozzarella, pasta filata, soft and hard cheese, and fresh cheeses like crescenza and stracchino.

### Properties:

Lactic acid producer culture with fast acidifying 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			
10	100	26	220
50	500	132	1100
100	1000	264	2200
200	2000	528	4400
500	5000	1321	11,000

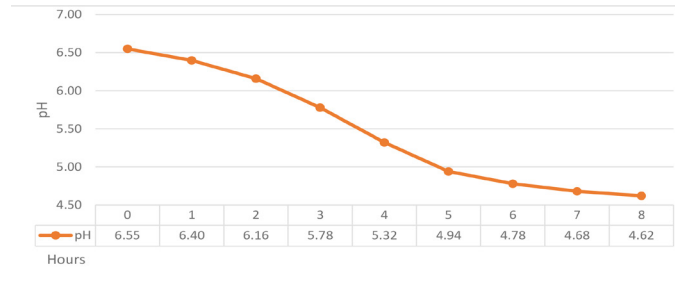
### Directions For Use:

Incubation temperature: 95-113°F (35 – 45°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	100.4°F (38°C)
Rehydration	10 Minutes
Test Medium	Reconstituted skimmilk powder (10% solid) pasteurized at 194°F (90°C) for 30 minutes
Innoculation Rate	10 CXU / 26 Gallons (100 Litres)
Delta Δ pH in 3 hours	1.20 ± 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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