



Lactoferm MSE-912 Cheese -Tek®

Description:

Concentrated, lyophilized, lactic starter culture for Direct Vat Inoculation (DVI®) ideal to make semi-hard cheese varieties, such as Gouda and fresh cheese as Cream cheese. This culture has the characteristic to produce aroma and CO₂. Natural mesophilic culture composed in decreasing order by:

Lactococcus lactis subsp. lactis
Lactococcus lactis subsp. cremoris
Lactococcus lactis subsp. lactis biovar diacetylactis
Leuconostoc mesenteroides subsp. cremoris

Dosage:

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

| | |
|---------------------------|-----------------------|
| Recommended dosage: | 1U for 100 lt of milk |
| Phage –specific rotation: | MSE - 910 |

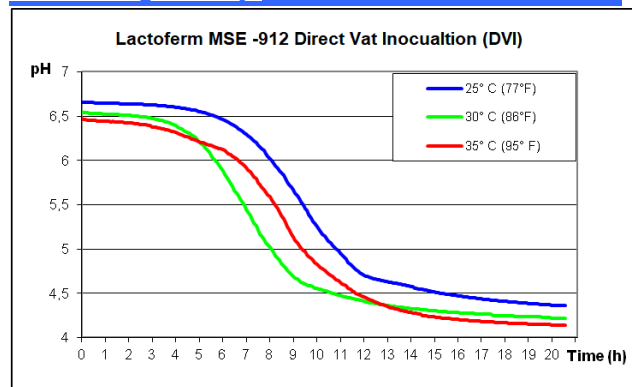
Modality of Use:

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.

Culture characteristics:

| | |
|-------------------------------------------------|------------|
| Optimum temperature for growth: | 30 - 32 °C |
| Maximum temperature of heating: | 35 °C |
| Gas production: | ++++ |
| Proteolytic activity: | - |
| Fermenting activity: | ++ |
| Aroma: | ++++ |
| Viscosity: | - |
| Salt Tolerance (expressed as 50% inhibition) | 2% NaCl |

Fermenting activity:



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

The information contained in this document is based on our laboratory and field studies. The statements contained in this document do not grant any express or implied warranty of any kind. Our company shall not be liable for any patent or brand infringement

Declaration of GMO and Allergens:

The product MSE - 912 does not contain any genetically modified microorganisms and is produced in compliance with Regulation (EC) No. 1829-1830/2003 and 1169/2011 as further amendments.

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

Microbiological controls:

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

Storage and Expiry:

If is stored in its original sealed packaging at a temperature of $\leq -18^{\circ}\text{C}$, the product keeps its characteristics unaltered for 24 months or for 12 months at $+5^{\circ}\text{C}$.

| | |
|--------------------|--|
| Invoice n° | |
| Lot n° | |
| Date of production | |
| Date of Expiry | |

| Company certified | | | Technical datasheet Rev 00 on 30.05.16 |
|-------------------------------------------------------------|--|--|----------------------------------------------|
| | | | |
| HALAL HIA 00322-026 Product certified Halal by HIA | | | Biochem s.r.l. |