Technical Data Sheet

Meatferm MCC

Description:

Freeze-dried starter culture ideal for the production of all kinds of fermented sausages where is required medium acidifying activity. The enzymatic activity of the culture prevent lower residual levels of nitrates and nitrites giving at the product defined color and mild aroma. The synergic action of the selected strain that compose this culture give to finished products excellent taste accompanied by the formation of color and mild taste.

Culture composed by selected strain of :

Staphylococcus carnosus Lactobacillus curvatus

Dosage and Modality of Use:

The culture is supplied in polyethylene/aluminium packet containing a single dose of 1 U each for 100 kg of meat . Code, expiry date and batch number are indicated on each packet. Before 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.

In the following table are indicated the modality of use:

| | Add directly the whole content in the first step of making process before ingredients mixing. |
|---------------------------|--|
| Dosage for 100 kg of meat | Reydrate the product into 100 ml of cold distilled water. Incorporate the solution within 4 hours at the beginning of manufacturing process before ingredients mixing. |

Culture characteristics:

| Optimum temperature for growth: | 28 - 30 °C |
|---------------------------------|---------------------|
| Maximum working temperature: | 37 °C |
| Minimum working temperature: | 25 °C |
| Fermenting activity at 30 °C : | pH 5.30 in 18 hours |
| Maximum acidification capacity: | pH 4.40 |
| Aroma: | +++ |
| Colour development: | +++ |

Physical properties:

| Appearance: | Powder |
|-------------|--------------------------|
| Color : | Off-white to brownish |
| Solubility: | Water soluble suspension |

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Declaration of GMO and Allerges:

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

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

Microbiological controls:

| Microorganisms | Method | Results * |
|------------------------|-----------------------------|------------------------|
| Lactobacillus | ISO 9232:2003 | > 3 x 10 11 cfu/packet |
| Micrococci | ISO 4833-2:2013 | > 3 x 10 11 cfu/packet |
| Moulds | ISO 21527-2:2008 | <10 / gr |
| Enterobacteriaceae | ISO 4832:2006 | <1 / gr |
| ASR bacteria | ISO 7251:2005 | Absent in 1 gr |
| Coag+staph | ISO 6888-3:2003 | Absent in 1 gr |
| Salmonella spp. | UNI ISO 6579:2004 | Absent /25 gr |
| Listeria monocytogenes | UNI EN ISO 11290- 1:2005 | Absent /25 gr |

^{*(}packet of 1 U for 100 Kg of fresh meat)

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.

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

| Company c | ertified | |
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| | *************************************** | Biochem s.r.l. |