DEM 3

Technical Data Sheet

General information

Description

DEM 3 consists of specifically selected strains of *Lactococcus lactis* ssp. *lactis*, *Lactococcus lactis* ssp. *cremoris*, *Lactococcus lactis* ssp. *lactis* biovar. *diacetylactis*, and *Leuconostoc* spp..
DEM 3 ensures a uniform and controlled production of sour cream like Smetana and fermented milk. Furthermore DEM 3 can be used in the production of fresh cheese, soft cheese and semi-hard cheese.
DEM 3 has medium citrate fermentation.

Application

Sprinkle the culture powder directly into process milk under aseptic conditions ensuring that the culture is well dispersed by gentle stirring.The following may be used as inoculation guidelines:

Product	Dose/100 l	Product	Dose/100 l
Fresh cheese	0.2-0.4	Soft cheese	0.2-0.4
Semi-hard cheese	0.2-0.4	Fermented milk	0.2-0.4
Sour cream	0.2-0.4		

Rotation

The recommended rotations are DEM 5/DEM 6/DEM 7.

Culture Information

Standardised laboratory acidification test is conducted in milk powder, reconstituted at 9%, at defined temperature.
Acidification profile: inoculation level corresponding to 0.4 doses per 100 litres of milk.
Standard activity: expressed as time/pH relations: 7.0 hours/pH 5.20 ± 0.15 at 32 °C (89.6 °F).

Technical Information

Data are obtained under standardised laboratory conditions, and consequently, should be considered as guidelines:

Trait	Result
Optimal temperature for growth	25-35 °C (77-95 °F)
Scalding temperature	Max. 41 °C (105.8 °F)
Acidification capability	pH 4.4

Microbiological specifications

Assay	Result	Method (Reference)
Bacillus cereus	< 100 CFU/g	M10 (ISO 7932)
Coagulase positive staphylococci*	< 10 CFU/g	M11 (ISO 6888-1-2)
Enterobacteriaceae	< 10 CFU/g	M02 (ISO 21528-1-2-3)
Escherichia coli	< 1 CFU/g	M27 (ISO 11866-1-2/IDF 170)
*Listeria monocytogenes**	Not detected in 25 g	M13 (ISO 11290-1-2)
Yeast and mould	< 10 CFU/g	M03 (ISO 6611/IDF 94)

Salmonella spp.*	Not detected in 25 g	M12 (ISO 6785/IDF 93)

Tests performed by Sacco S.r.l. on behalf of CSL S.r.l.
** Analysed on regular basis. Analytical methods are available upon request.*

Safety information

Heavy metal analysis

Heavy metal*	Amount (ppm)
Lead (Pb)	< 1
Mercury (Hg)	< 0.03
Cadmium (Cd)	< 0.1

**Analyzed on a regular basis.*

Safety sheet

This product is not hazardous; therefore provision of a Safety Data Sheet (SDS) is not mandatory (REACH Art. 31).
A Safety Information Data Sheet has been made as a voluntary presentation of certain information that may assist the user in the handling. The safety information is available upon request.

GMO status

CSL organisms are not genetically modified (GMO), in accordance to the European Directive 2001/18/EC.
This product does not require labelling with regard to the use of GMO, in accordance to Regulation (EC) No. 1829/2003, and Regulation (EC) No. 1830/2003.

Allergens

The raw materials used are free of the following components and their products thereof: cereals containing gluten, crustaceans, eggs, fish, peanuts, soybeans, nuts, celery, mustard, sesame seeds, sulphur dioxide and sulphite, lupin and molluscs.
This product contains MILK.
The list of allergens is in compliance with Regulation (EC) 1169/2011.

BSE/TSE status

This product is considered safe with respect to bovine spongiform encephalopathy (BSE) or transmissible spongiform encephalopathies (TSEs) transmissions in accordance to Regulation EMA 410/01 rev. 3.

Other information

Colorants

This product does not contain added colorants, in accordance to Regulation (EC) 1333/2008.

Packaging information

The freeze-dried culture is packaged inside waterproof and airproof pouches, consisting of three layers (in order, going inwards): polyester, aluminium, and polyethylene.
The packaging material used is food grade.

Storage and shelf-life

Cultures should be preferably stored, at -18 °C (-0.4 °F), or below.
Under these conditions and in the original sealed package, the shelf-life of the product is 18 months.
The product has a shelf-life of 12 months when stored at 4 ± 2 °C (39.2 ± 3.6 °F).

Certificate of analysis

Lot's certificate of analysis is available upon request.

Certifications

General

CSL S.r.l. is ISO 22000:2005 and FSSC 22000 certified since 2014. Certificates are available in the web site www.saccosystem.com.

Kosher	CSL cultures are generally Kosher approved. Please consult Certificates that are available in the web site www.saccosystem.com.
Halal	CSL cultures are generally Halal approved. Please consult Certificates that are available in the web site www.saccosystem.com.
Service and technical support	Please contact your distributor for guidance and instructions for your choice of culture and processing. Information about additional package sizes and sales units is also available upon request.
Liability	The information provided is to the best of our knowledge true, and given in good faith. No guarantee against patent infringement is implied or inferred. This may not be the most updated version of the TDS. For the latest version of this document please visit our website or contact your distributor.