

CHN-19

Product Information

Version: 6 PI EU EN 11-11-2019

Description

Mesophilic aromatic culture, type LD. The culture produces flavor and CO₂. This range provides cultures with fast acidification properties at a low inoculation rate.

Culture composition:

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

Material No:	713582	Color:	Off-white to slightly reddish or brown
Size	30X50 U	Format:	FD-DVS
Type	Pouch(es) in box	Form:	Granulate

Storage and handling

< -18 °C / < 0 °F

Shelf life

At least 24 months from date of manufacture when stored according to recommendations.
At +5°C (41°F) the shelf life is at least 6 weeks.

Application

Usage

The culture is primarily used in the manufacturing of Continental semi-hard cheese varieties with eyes, e.g. Gouda, Edam, Leerdam and Havarti.

Suggested dosage

As a principal rule 1000 U of freeze-dried DVS cultures will correspond to 100 l of active bulk starter. However, specific usage rates should be determined experimentally before a new application.

Recommended inoculation rate

Amount of milk to be inoculated	500 l/ 130 gal	2,000 l/ 520 gal	5,000 l/ 1,300 gal	10,000 l/ 2,600 gal
Amount of DVS culture	50 U	200 U	500 U	1,000 U

Designed for optimal performance, the composition and recommended inoculation rate for this culture were carefully developed by use of unique microbial strains, advanced biotechnological principles and more than 140 years of accumulated experience from the dairy industry.

Warning: Applying lower than recommended inoculation rate may cause undesired variation in product quality, lower production efficiency, product yield losses, potential fermentation failures and an increased risk of bacteriophage attacks.

Directions for Use

Remove cultures from the freezer just prior to use. Do not thaw. Disinfect the package prior to opening. Open the pouch and pour the freeze-dried granules directly into the pasteurized product using slow agitation. Agitate the mixture for 10-15 minutes to distribute the culture evenly. The recommended incubation temperature is dependent on the application in which the culture is used. For more information on specific applications see our technical brochures and suggested recipes.

CHN-19

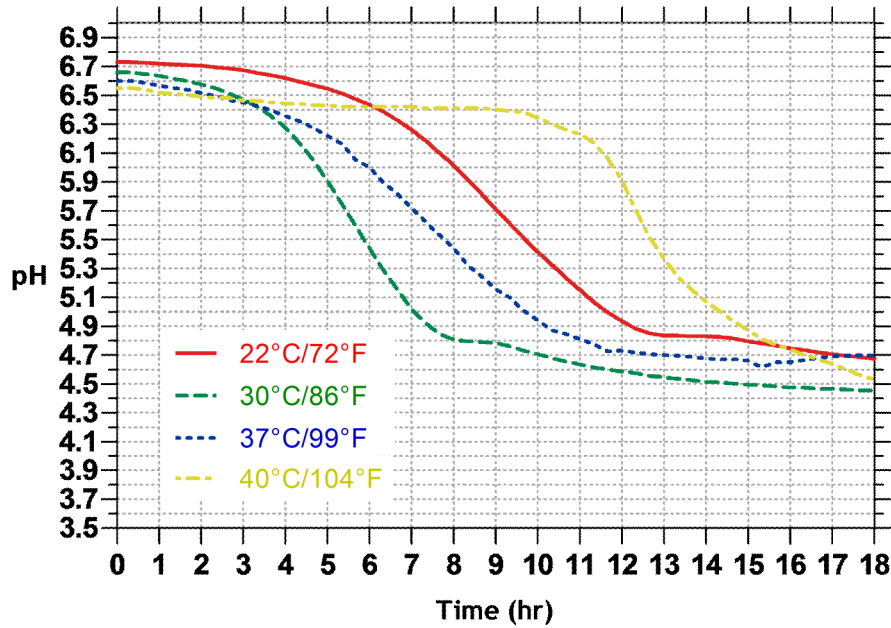
Product Information
Version: 6 PI EU EN 11-11-2019

Range

Cultures in this series include CHN-11 and CHN-19 (frozen and freeze-dried) and B-11 and CHN-120 (frozen).

Technical Data

Acidification curve



Fermentation conditions:
Lab milk 9.5 % T.S.: 100°C/30 min
Inoculation: 500U/5000L

Other Information

Sugars and organic acids:

The residual content of sugars and organic acids (mg/g) in the cheese whey are listed below. Samples have been inoculated at the temperature profile and analyzed on HPLC (High Pressure Liquid Chromatography).

- Citrate: 1.7 mg/g
- Lactose: 34.2 mg/g
- Glucose: 0.0 mg/g
- Galactose: 4.1 mg/g
- Lactate: 8.6 mg/g
- Acetic acid: 0.0 mg/g

Analytical Methods

References and analytical methods are available upon request.

Dietary information

Kosher: Kosher Dairy Excl. Passover
Halal: Certified
VLOG: Conform

CHN-19

Product Information

Version: 6 PI EU EN 11-11-2019

Legislation

Chr. Hansen's cultures comply with the general requirements on food safety laid down in Regulation 178/2002/EC. Lactic acid bacteria are generally recognized as safe and can be used in food, however, for specific applications we recommend to consult national legislation.

The product is intended for use in food.

Food Safety

No guarantee of food safety is implied or inferred should this product be used in applications other than those stated in the Usage section. Should you wish to use this product in another application, please contact your Chr. Hansen representative for assistance.

Labeling

Suggested labeling "lactic acid culture" or "starter culture", however, as legislation may vary, please consult national legislation.

Trademarks

Product names, names of concepts, logos, brands and other trademarks referred to in this document, whether or not appearing in large print, bold or with the ® or TM symbol are the property of Chr. Hansen A/S or an affiliate thereof or used under license. Trademarks appearing in this document may not be registered in your country, even if they are marked with an ®.

Technical support

Chr. Hansen's Application and Product Development Laboratories and personnel are available if you need further information.

GMO Information

In accordance with the below mentioned legislation of the European Union we can inform that:

CHN-19 is not a GM (genetically modified) food*.

It does not contain or consist of GMOs and is not produced from GMOs in accordance with Regulation 1829/2003* on GM food and feed.

As such GM labelling is not required for CHN-19 or the food it is used to produce**. Moreover, the product does not contain any GM labelled raw materials.

* Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed.

** Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC.

Please note the information presented here does not imply that the product can either be used in, or is externally certified to be used in, food or feed labelled as 'organic' or 'GMO free'. Requirements to make these claims vary per country, please contact us for more information.

CHN-19

Product Information

Version: 6 PI EU EN 11-11-2019

Allergen Information

List of common allergens in accordance with the US Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) and EU Regulation 1169/2011/EC with later amendments	Present as an ingredient in the product
Cereals containing gluten* and products thereof	No
Crustaceans and products thereof	No
Eggs and products thereof	No
Fish and products thereof	No
Peanuts and products thereof	No
Soybeans and products thereof	No
Milk and products thereof (including lactose)	Yes
Nuts* and products thereof	No
List of allergens in accordance with EU Regulation 1169/2011/EC only	
Celery and products thereof	No
Mustard and products thereof	No
Sesame seeds and products thereof	No
Lupine and products thereof	No
Mollusks and products thereof	No
Sulphur dioxide and sulphites (added) at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	No

* Please consult the EU Regulation 1169/2011 Annex II for a legal definition of common allergens, see European Union law at: www.eur-lex.europa.eu