

CHR. HANSEN

FD-DVS CHN-19

Product Information

Description	Mesophilic Aromatic Culture, type LD. Multiple mixed strain culture containing <i>Lactococcus lactis</i> subsp. <i>cremoris</i> , <i>Lactococcus lactis</i> subsp. <i>lactis</i> , <i>Leuconostoc mesenteroides</i> subsp. <i>cremoris</i> and <i>Lactococcus lactis</i> subsp. <i>diacetylactis</i> . The culture produces flavor and CO ₂ . CHN-19 is packed in a convenient freeze-dried form.		
Application	The culture is primarily used in the manufacture of Continental cheese types (Gouda, Edam, Leerdam, Samsøe).		
Packing	Packing size	Item number	
	10 x 50U	100100	
	25 x 200U	100127	
	20 x 500U	100161	
Availability	In addition to CHN-19, other cultures in this series include CHN-11, CHN-120, FLORA-DANICA and B-11.		
Storage and shelf life	Freeze-dried cultures should be stored at -18°C (0°F) or below. If the cultures are stored at -18°C (0°F) or below, the shelf life is at least 24 months. At +5°C (41°F) the shelf life is at least 6 weeks.		
Instructions for use	Remove the cultures from the freezer just prior to use. DO NOT THAW THESE CULTURES. Sanitize the top of the pouch with chlorine. 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.		
Dosage	Recommended dosage of freeze-dried DVS cultures in units to liters:		

DVS inoculation percentage	Amount of milk to be inoculated			
	1,000 l	5,000 l	10,000 l	15,000 l
1000U/5000 l	200U	1000U	2000U	3000U
500U/5000 l	100U	500U	1000U	1500U
250U/5000 l	50U	125U	500U	750U

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Recommended dosage of freeze-dried cultures in units to US lbs:

DVS inoculation percentage	Amount of milk to be inoculated			
	2,270 lbs	11,350 lbs	22,700 lbs	34,000 lbs
1000U/11,350 lbs	200U	1000U	2000U	3000U
500U/11,350 lbs	100U	500U	1000U	1500U
250U/11,350 lbs	50U	125U	500U	750U

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

Incubation temperature

Recommended incubation temperature is 35-45°C (95-113°F). For more information please use Chr. Hansen's suggested recipes.

Kosher status

CHN-19 is Kosher approved (Circle K D) for year-round use, excluding Passover.

Technical Information**- Flavor and gas production**

Flavor: High
Gas: High (CO₂)

- Salt sensitivity

50% inhibition: 3.6% NaCl
100% inhibition: 6.0% NaCl

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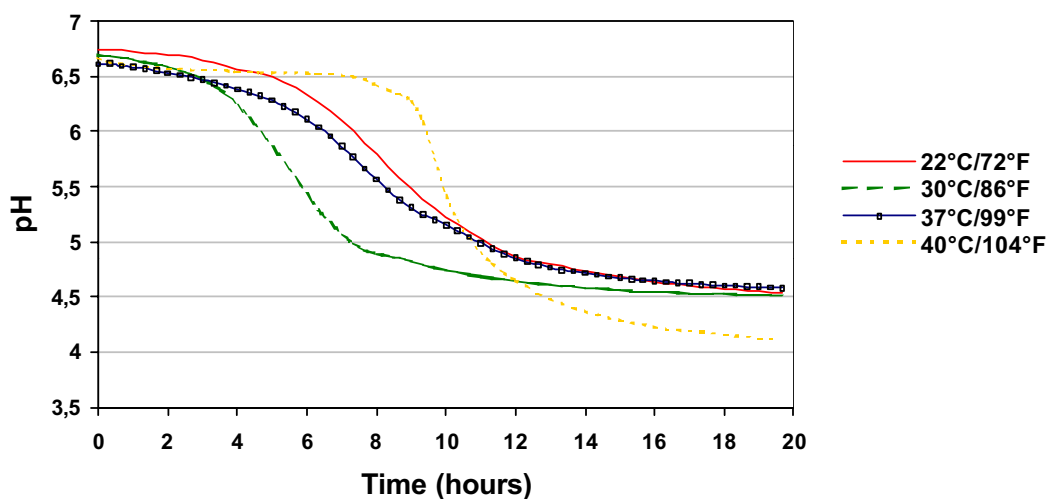
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Figure 1. The effect of temperature on acidification

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Fermentation conditions:
Lab milk 9.5% T.S.: 140°C/8 sec. - 100°C/30 min
500U/5000 l Inoculation

NB: Note that the accuracy of these curves is relative and subject to experimental error.

Technical service

Chr. Hansen's world-wide facilities and the personnel of our application and technology center are at your disposal with assistance and instruction.

References

References and analytical methods are available upon request.

The information contained herein is to our knowledge true and correct and presented in good faith. However, no warranty, guarantee, or freedom from patent infringement is implied or inferred. This information is offered solely for your consideration and verification.

EN-CHN-19-FD-PI-1001

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F-DVS CHN-19

Product Information

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Application	The culture is primarily used in the manufacture of Continental cheese types (Gouda, Edam, Leerdam, Samsoe).		
Packing	Packing size 500 g carton	Item number 501593	
Availability	In addition to CHN-19, other cultures in this series include CHN-11, CHN-120, FLORA-DANICA and B-11.		
Storage and shelf life	Frozen cultures should be stored at -45°C (-49°F) or below. If the cultures are stored at -45°C (-49°F) or below, the shelf life is at least 12 months.		
Instructions for use	Remove cultures from the freezer just prior to use. DO NOT THAW THESE CULTURES. Sanitize the gable top of the carton with chlorine. Open the carton and pour the frozen pellets directly into the pasteurized product using slow agitation. Agitate the mixture for 10 to 15 minutes to distribute the culture evenly.		
Dosage	Recommended dosage of frozen DVS cultures in grams to liters:		

DVS inoculation percentage	Amount of milk to be inoculated			
	10,000 l	15,000 l	20,000 l	25,000 l
0.005%	500 g	750 g	1000 g	1250 g
0.010%	1000 g	1500 g	2000 g	2500 g
0.015%	1500 g	2250 g	3000 g	3750 g
0.020%	2000 g	3000 g	4000 g	5000 g

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Recommended dosage of frozen cultures in grams to US lbs:

DVS inoculation percentage	Amount of milk to be inoculated			
	22,700 lbs	34, 000 lbs	45,500 lbs	57,000 lbs
0.005%	500 g	750 g	1000 g	1250 g
0.010%	1000 g	1500 g	2000 g	2500 g
0.015%	1500 g	2250 g	3000 g	3750 g
0.020%	2000 g	3000 g	4000 g	5000 g

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

Kosher status

CHN-19 is Kosher approved (Circle K D) for year-round use, excluding Passover.

Technical Information**- Flavor and gas production**

Flavor: High
Gas: High (CO₂)

- Salt sensitivity

50% inhibition: 3.2% NaCl
100% inhibition: 6.0% NaCl

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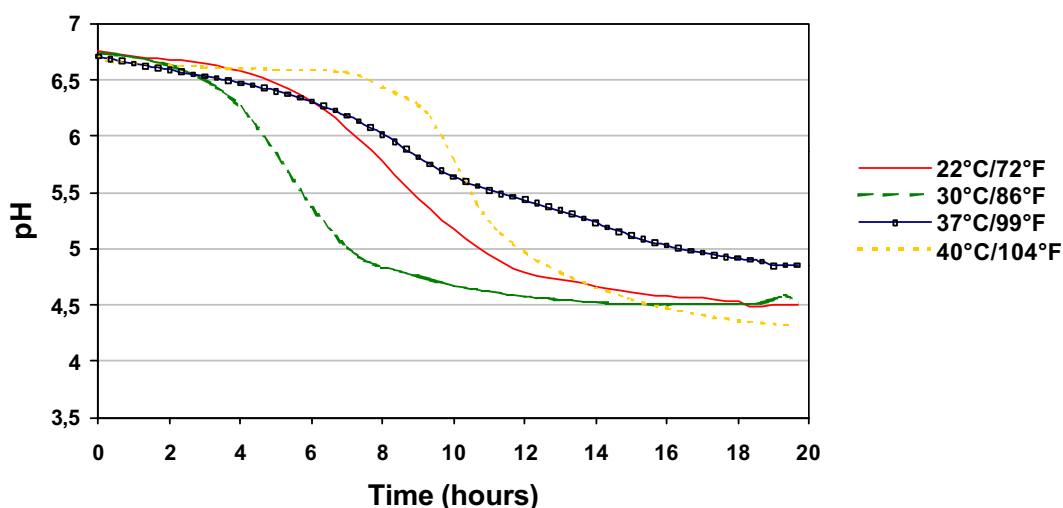
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Figure 1. The effect of temperature on acidification

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Fermentation conditions:
Lab milk 9.5% T.S.: 140°C/8 sec. - 100°C/30 min
0.01% Inoculation

NB: Note that the accuracy of these curves is relative and subject to experimental error.

Technical service

Chr. Hansen's world-wide facilities and the personnel of our application and technology center are at your disposal with assistance and instruction.

References

References and analytical methods are available upon request.

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