



Application Data Sheet

DSM Food Specialties B.V.

P.O. Box 1
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The Netherlands

www.dsm.com

DELVO® TEC LL-50 series

(revision date : 23/01/2020)

Description and Composition

Highly concentrated, free-flowing, deep-frozen pelletised DVC (direct vat cultures), ready to be added directly to the vat.

| DELVO® Cheese LL-50 Series Names | | | | | | | | | |
|----------------------------------|--------|--------|--------|--------|-------|--------|--------|--------|--------|
| LL-50A | LL-50B | LL-50C | LL-50D | LL-50E | LL-5F | LL-50G | LL-50X | LL-50Y | LL-50Z |

The **DELVO® TEC LL-50 SERIES A–F** consist of a blend of specially selected strains of:

Lactococcus lactis ssp. *lactis*
Lactococcus lactis ssp. *cremoris*

The **DELVO® TEC LL-50 G** consist of a blend of specially selected strains of:

Lactococcus lactis ssp. *cremoris*

The **DELVO® TEC LL-50 SERIES X–Z** consist of a blend of specially selected strains of:

Lactococcus lactis ssp. *lactis*

This series of cultures are described as 'O' strains, this means that they do not produce gas, and therefor are suitable for use in all mesophilic cheese applications where a close texture and no eyes are required.

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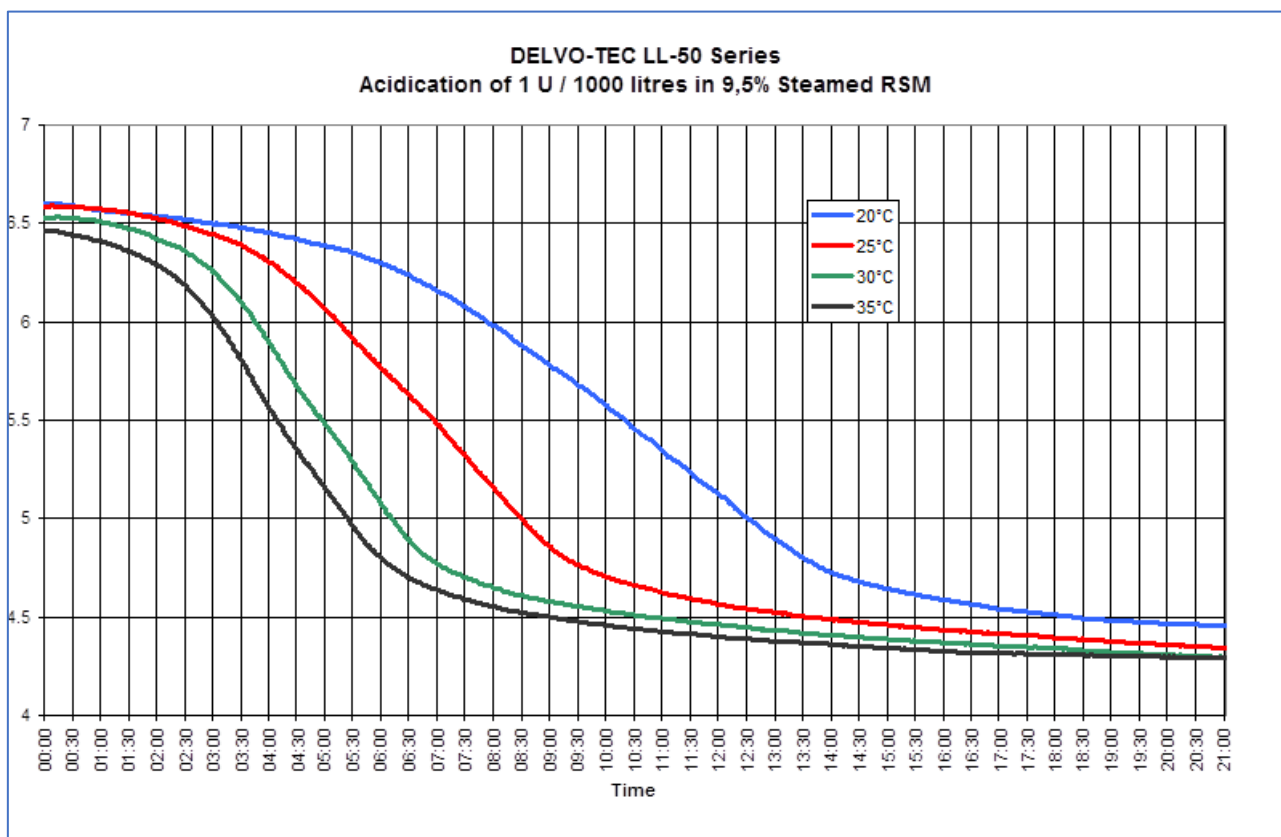
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Application guidelines:

| Example Application | Indicative Dosage | In Combination |
|---|---|---|
| Cheddar, Gouda, Manchego, Havarti Varieties | 1 - 2 units /1000 litres (2275 lbs.) (Depending on conditions) | It is possible to combine the LL-50 series with other cultures such as our DELVO®ADD adjunct cultures for enhanced flavour or texture |
| Cottage Cheese | 2 - 5 units /1000 litres (2275 lbs.) (Depending on conditions) | |

Acidification Curves:



NB. The curves above are obtained in experimental laboratory conditions and are only shown for illustration purposes.

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General Recommendations for use

****Do not thaw pouches of pellets prior to use****

Frozen culture in pouches thaws quickly, minimize exposure time outside of frozen conditions.

It is very important that the entire package of pellets is used all at once.

Due to varying densities of the pellets, these packages do not contain uniform blends so use of partial packages may result in inconsistent product performance.

Technical Service

Our Technical Service Teams can help you in selecting the most suitable starter solutions for your application by designing, supervising and discussing the results of laboratory and plant trials.

DSM is the dairy industry's leading supplier, catering to the needs of multinational companies as well as small local producers. We are dedicated to supplying solutions, not just products. We work closely with our customers to help them overcome specific market challenges. To achieve this, we combine years of experience with a dedication to innovation and the best technical support possible. We apply this approach to all dairy markets, including cheese, milk, fermented milk products and whey processing.

DSM services include:

- Technical in house know-how to support application development;
- Tailor made training possibilities;
- Technical Service

For further information please contact:

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Or please contact your local representative.

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