

## Technical Data Sheet

### Casein hydrolysate (acid hydrolyzed) for microbiology

Catalogue number: 102245

#### Description

Casein hydrolysate is produced by the digestion of casein with hydrochloric acid. Under these digestion conditions a high content of free amino acid is obtained and a proportion of vitamins as well as growth promoting substances are retained. Tryptophane is destroyed by the digestion. The inorganic salts level is high due to neutralization of the digestive acid.

#### Application

Thanks to its low iron content acid hydrolysate of casein can be used in toxin expression for the production of vaccines. Also, it can be used for industrial fermentations with yeasts and fastidious *Bacillus* spp. It is especially suited for the large-scale cultivation of diphtheria bacteria, tetanus bacilli and *streptococci*, of toxins and streptase. In industrial fermentations it favors a high yield of biomass, particularly for certain yeasts and fastidious bacilli. Furthermore, casein hydrolysate can serve as component for culture media preparation.

#### Typical Analysis

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| Appearance                    | Lightly yellow to lightly brownishyellow, fine powder |
| pH-value (5% water)           | 4.7 – 7.0                                             |
| Total nitrogen (N) (Kjeldahl) | 7.0 – 8.5%                                            |
| Amino nitrogen (as N)         | 5.0 – 6.5%                                            |
| Sulfated ash (800 °C)         | ≤ 58%                                                 |
| Loss on drying (105 °C)       | ≤ 6.0%                                                |
| Suitability for microbiology  | passes test                                           |

#### Ordering Information

| Product                                                  | Cat. No.   | Pack content |
|----------------------------------------------------------|------------|--------------|
| Casein hydrolysate (acid hydrolyzed)<br>for microbiology | 1022450500 | 500 g        |
|                                                          | 1022455000 | 5 kg         |

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Lit. No. MK\_TN13294EN Ver. 1.0 02/2024