

## LYSOZYME DESCRIPTION

Marduk Lysozyme is an antimicrobial enzyme extracted from egg-white, it is mainly used to lyse the cell wall of Gram-positive bacteria in processed foods.

### KEY BENEFITS

- \* Lysis of Gram-positive bacteria
- \* Shelf life extension
- \* Natural, Consumer-friendly label

### APPLICATION AREAS

Beverage (e.g. Beer, Wine); Dairy (e.g. Cheese).

### REGULATIONS

In Cheese, Lysozyme is considered as generally recognized as safe (GRAS) by the U.S. FDA and approved as a preservative (E1 105) under the European Additives Directive to prevent late blowing in ripened cheese. Lysozyme is also approved for use in cheese in Australia, Canada, China, Japan and South Korea. In wine, OIV has approved Lysozyme as active ingredient up to the level of 500 mg/kg. It is recommended to use it after ensuring compliance with your local regulations.

## Microorganisms and MIC (mg/kg)

| Microorganisms            | MIC (mg/kg) |
|---------------------------|-------------|
| Brucella spp.             | 8           |
| Bacillus cereus           | 1           |
| Bacillus coagulans        | 2-5         |
| Campylobacter jejuni      | 8           |
| Clostridium botulinum     | 2           |
| Clostridium tyrobutyricum | 2-6         |
| Enterococcus faecalis     | 5           |
| Lactobacillus spp.        | 1           |
| Listeria monocytogenes    | 1           |
| Pseudomonas aeruginosa    | 8           |
| Yersinia enterocolitica   | 7           |