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## LYSOZYME (Chicken egg white)

### SPECIFICATION SHEET

I.U.B. 3.2.1.17

### DESCRIPTION

Lysozyme is a food grade enzyme derived from Non-GMO chicken eggs that is used for destroying bacterial cell walls through the hydrolysis of polysaccharide cell wall components. It is sold for use in foods and is GRAS in the USA.

### PHYSICAL PROPERTIES

An off white colored, fine, free-flowing powder, soluble in water, free of offensive odor and taste.

### ENZYMATIC PROPERTIES

The pH optimum is 6.6 with a stability range of 3.5 to 7.0. The optimum temperature of 55°C with a stability range from 30°C to 90°C.

### ACTIVITY

The MCG unit is based on the rate of lysis of *Micrococcus lysodeikticus*, compared to a reference standard, at 6.6 pH and 37°C (99° F). The acceptance criteria for all enzyme assays is: NLT 85.0% and NMT 115.0% of the declared units of enzyme activity.\*

**COUNTRY OF ORIGIN** Germany

### STORAGE/SHELF LIFE/STANDARD PACK SIZE

Product is stable for two years (24 months) if stored at or below 10°C in sealed poly bags in boxes or drums away from sunlight and high humidity. Product is packed in 25 kilo fiber drums or double-wall boxes.

### HANDLING PRECAUTIONS

Avoid the formation of aerosol and dust of the product. Repeated inhalation of enzyme aerosol or dust may cause allergic type reactions in sensitized individuals. For detailed information please refer to the SDS.

| Description           | Specification  | Method                   |
|-----------------------|----------------|--------------------------|
| Activity:             | NLT 950 MCG/MG | FCC                      |
| Identity:             | Lysozyme       | FTIR                     |
| Moisture:             | NMT 10%        | Ohaus MB-45              |
| Metals:               |                |                          |
| Lead                  | NMT 5 ppm      | SW-846 6020              |
| Microbiological Data: |                |                          |
| TPC                   | <10,000 CFU/g  | Soleris / AOAC 990.12    |
| E.coli                | Negative/10g   | Soleris / AOAC 991.14    |
| Enterococcus          | <100 CFU/g     | AOAC2003.01              |
| Salmonella**          | Negative/25g   | BAM Ch. 5 / AOAC 2011.03 |
| Yeast                 | <1,000 CFU/g   | Soleris / AOAC 997.02    |
| Mold                  | <1,000 CFU/g   | Soleris / AOAC 997.02    |
| Coliforms             | <100 CFU/g     | Soleris / AOAC 991.14    |

\*FCC 9 Page 414

\*\*If Enterococcus test results exceed 100 CFU/g then Salmonella testing is completed.