

## 7. Product Description and Safety

### 7.1 Hemicell Liquid

#### Composition

Liquid *Bacillus lentus* fermentation solubles, stabilizers, and preservative. The level of stabilizers and preservatives differ btw formulations.

Guaranteed minimum activity of beta-D-mannanase (EC 3.2.1.78): 720,000 Units/ml

#### Usage instructions

The approved use may vary between countries. For poultry and swine diets: Add 110 mL/MT (100 mL/ton) Hemicell Liquid.

Hemicell Liquid does not tolerate pelleting at temperatures above 50-55 °C (122-131 °F), and should therefore always be applied post pelleting, when used in pelleted diets. Dilute the 110 mL Hemicell with 890 mL clean water immediately before its use to spray a volume of 1 liter dilution per tonne complete feed (Equivalent to a dose of 0.0136% w/v).

#### Properties

**Hemicell** is supplied as a light brown liquid concentrate product having the following properties:

Specific gravity: North America: 1.13 to 1.15 pH 7.0 to 7.4 confirm pH

International (Supreme): 1.23 to 1.25 pH 7.0 to 7.4

#### Impurities

**Hemicell** typically contains less than following levels of impurities:

Coliforms < 30 CFU/g *E. coli* Negative/25 g

*Salmonella* Negative/25 g Total Viable Count < 5 x 10<sup>4</sup> CFU/g

Annually, three batches are tested for compliance with these levels:

Anaerobic count < 100 CFU/g Aflatoxins as B1 < 0.02 ppm

Deoxynivalenol < 2.5 ppm Fumonisin < 1.0 ppm

Ochratoxin < 2.0 ppb T2 Toxin < 25 ppb

Zearalenone < 50 ppb Total Heavy Metals (as lead) < 30 ppm

Arsenic < 2 ppm Cadmium < 1 ppm

Fluorine < 150 ppm Lead < 5 ppm

Mercury < 0.1 ppm Dioxins, WHO PCDD/F-TEQ < 0.75 ng/kg

#### Storage

Store liquid product in closed containers in a cool (below 25° C), dry place. The product will meet the guaranteed level of enzyme activity for at least 12 months provided that it has been stored according to these instructions.

#### Packaging

208 L (55 gal) drums and IBC's of 1,000 L (264 gal) or 1249 L (330 gal) for US customers.

#### Safety and Handling

R42, Possible respiratory sensitizer. Avoid unnecessary exposure and wear suitable protective clothing (e.g., face mask, goggles, gloves, and overalls) when handling.