SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier: Servomyces D50
1.2 Identified use: Fermentation Nutrient
1.3 Supplier details: Danstar Ferment A.G
   Poststrasse 30, 6300 Zug, Switzerland
   Tel.: +1 514 522-2133 Email: info@lallemand.com
1.4 Emergency telephone: Contact your local doctor or hospital

SECTION 2 - HAZARD IDENTIFICATION

2.1 Classification of the substance/mixture: Not dangerous according to Directive 1272/2008.
2.2 Label elements: None
2.3 Other Hazards: None

SECTION 3 – INFORMATION ON INGREDIENTS

Product composition: Zinc enriched yeast in powder form

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>% by Wt</th>
<th>LD50 &amp; LC50</th>
<th>Osha PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>zinc</td>
<td>7440-66-6</td>
<td>5% (50,000 ppm)</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

The other ingredients are not listed as they have no impact on the classification of the substance.

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye contact: Adequately flush eyes with water.
Skin contact: Wash affected area with soap and water.
Inhalation: Immediately remove person to fresh air.
Ingestion: Rinse mouth and throat thoroughly with water. Drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: Possible redness and irritation.
Skin contact: Possible redness and irritation.
Inhalation: May cause coughing (irritation) or irritate asthma.
Ingestion: The recommended daily allowance (RDA) for adults for zinc is 15 milligrams per day. The NOAEL (No Observed Adverse Effect Level) has been established as up to 30 milligrams per day, which is equivalent to 0.6g of Lalmin Zn 50,000 ppm zinc yeast. The lowest Adverse Effect Level (LOAEL) defined as the average daily zinc intake causing individuals within a population to develop overt signs of toxicity is 60 mg per day, which is equivalent to 1.2 g of Lalmin Zn 50,000 ppm zinc yeast. Ingestion of highly concentrated zinc yeast powder could induce vomiting, headache, listlessness. Ingestion of more than 60 mg zinc per day is toxic (i.e. more than 1.2g of Lalmin Zn yeast).

4.3 Indication of any immediate medical attention and special treatment needed:

None. If any symptoms persist, seek medical attention.
**SAFETY DATA SHEET**

**SECTION 5 – FIRE FIGHTING MEASURES**

5.1 **Extinguishing media**
   - Suitable: Water, foam, carbon dioxide, dry powder
   - Unsuitable: None

5.2 **Special hazards arising from the material:** None

5.3 **Advice to firefighters:** Wear a self-contained breathing apparatus (SCBA) when exposed to confined or enclosed fires as product powder could be in the air.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

6.1 **Personnel precautions:**
   - Non-emergency: None
   - Emergency: None

6.2 **Environmental precautions:** None

6.3 **Method and materials for clean up:**
   Use a vacuum or broom and dust pan. Vacuum up or sweep the spill into a dust pan. Powder may be collected in a container or bag before being placed in the trash. Dispose of waste in the proper receptacle for trash.

6.4 **References to other sections:** See Section 8 for personal protective equipment.

**SECTION 7 – HANDLING & STORAGE**

7.1 **Precautions for safe handling**
   - Handling: Avoid breathing dust. Avoid contact with eyes.
   - Occupational hygiene: Wash hands thoroughly after handling.

7.2 **Conditions for safe storage**
   - Risks: Not at risk for corrosion, fire, explosion, or chemical reaction.
   - Place of storage: No special instruction to minimize risks (see above).
   - Fire/explosion protection: None needed.

7.3 **Specific end use:** None

**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

8.1 **Control parameters**
   - Exposure limits: No limit.
   - Biological limits: No limit.

8.2 **Exposure controls**
   - Engineering: None
   - Eye/face protection: Protective glasses should be worn in conditions of excessive dusting.
   - Skin
     - Hand: None
     - Other: None. Wear appropriate clothing for work.
   - Respiratory protection: Protective mask should be worn in conditions of excessive dusting.
   - Thermal protection: None
   - Environmental exposure: None
SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance: tan powder
Odour: typical yeast aroma
Solubility: mostly soluble
Odour threshold; pH; Melting point/Freezing point; Initial boiling point and boiling range; Flash point;
Evaporation rate; Flammability; Vapour pressure; Vapour density; Relative density; Partition
coefficient (n-octanol/water); Auto-ignition temperature; Decomposition temperature; Viscosity;
Explosive properties; Oxidising properties: Not Applicable

9.2 Other information: None

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity: Not reactive
10.2 Chemical stability: Stable
10.3 Possibility of hazardous reactions: None
10.4 Conditions to avoid: None
10.5 Incompatible materials: None
10.6 Hazardous decomposition products: None

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity: No known effects.
Skin corrosion/irritation: Possible irritation to skin.
Eye damage/irritation: Possible irritation to eye.
Respiratory /Skin sensitization: Possible allergic reaction or sensitization.
CMR (Carcinogenity, Mutagenicity, Reproductive toxicity): No known effects.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity: No known information is available.
12.2 Persistence and degradability: No known information is available.
12.3 Bioaccumulative potential: No known information is available.
12.4 Mobility in soil: No known information is available.
12.5 Results of PBT and vPvB assessment: No known ecological effects.
12.6 Other adverse effects: No known ecological effects.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product and packaging can be disposed of in regular trash or waste. No special disposal method
required. Follow all applicable local laws for recycling, bagging, and disposal of trash.
SECTION 14 – TRANSPORT INFORMATION

14.1 UN Number: Not relevant
14.2 UN proper shipping name: Not relevant
14.3 Transportation hazard class: Not classified as dangerous.
14.4 Packing group: Not relevant
14.5 Environmental hazards: None
14.6 Special precautions: None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not relevant

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Reg. EC 1272/2008 - This product is not required to be registered under REACH.
15.2 Chemical safety assessment: Not relevant

SECTION 16 – OTHER INFORMATION

None

Disclaimer: The information, data and recommendations contained in this SDS are provided in good faith, obtained from reliable sources, and believed to be true and accurate as of the date of revision. The SDS serves as description of the products in regard to necessary safety measures. No warranty, expressed or implied, regarding the product described in this SDS shall be created or inferred by any statement in this SDS.