PRODUCT DESCRIPTION – **LIPASE POWDER 600**

**MFG:** Danisco

**DESCRIPTION**

A fine, free-flowing powder containing sodium chloride and active pregastric esterase enzymes obtained from bovine calf.

**USAGE**

¼ teaspoon diluted in 1/4 cup water for up to 3 gallons of milk.

0.5-1.5 oz. /1000 pounds of milk.

**DIRECTIONS FOR USE**

Dilute the appropriate amount of lipase powder in 80 times the volume of cool, unchlorinated water in a sanitary plastic or stainless container. Stir to rehydrate 10 minutes before adding to milk. Add to milk before rennet/coagulant is added. Mix thoroughly into the milk.

LIPASE POWDER 600 produces a specific ratio of free fatty acids as a result of milk fat lipolysis. This specific enzyme action results in a characteristic flavor. The optimum temperature range for activity of lipase powders is 82-98°F (27.7-236.6°C). In an aqueous solution, temperatures of 120°F (48.8°C) will reduce enzyme activity and milk pasteurization temperatures will completely inactivate these enzymes. When used in a pasta filata cheese, mixer-molder temperatures over 133°F (56.1°C) will cause enzyme inactivation. The optimum pH for the reaction of lipase powders with milk fat is 5.5.

**STORAGE**

Keep in a tightly sealed container in a cool, dry, dark place. Store at 14°F (-10°C) Shelf life: Six months from date of manufacture.

**PACKAGING**

Product packaged in a HDPE bottle labeled with product name, lot number and weight of product. Bottles are placed in a box for shipping.

**COMPOSITION**

Sodium chloride and active pregastric esterase enzymes obtained from bovine calf

**PROPERTIES**

Typical fatty acid profile-mole percent of fatty acid produced in milk fat for LIPASE POWDER 600:

- Butyric: 36.3%
- Caproic: 11.0%
- Caprylic: 5.1%
- Capric: 5.9%
- Lauric and higher: 41.7%

**MICROBIOLOGICAL SPECIFICATIONS**

- Esterase Assay: >64.0 LFU/g
- Standard plate count: <10,000/ml
- Coliforms: <10/ml
- E. coli: neg. by test (<0.3/g
- Staphylococci coagulase positive: neg. by test (<10/g
- Listeria monocytogenes: neg. (25 g enrichment)
- Salmonella: neg. (40 g enrichment)

**PURITY AND LEGAL STATUS**

Local food regulations should always be consulted concerning the status of this product, as legislation regarding its use in the food may vary from country to country.

**SAFETY AND HANDLING**

MSDS is available on request.

**GMO STATUS**


**KOSHER STATUS**

KOSHER Tablet K
PRODUCT DESCRIPTION - **LIPASE POWDER 600**

**ALLERGENS**

Table below indicates the presence of the following allergens and products thereof:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>Allergens</th>
<th>Description of components</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td>wheat</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>other cereals containing gluten</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>crustacean shellfish</td>
<td></td>
</tr>
<tr>
<td>X</td>
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<td>eggs</td>
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<td>X</td>
<td></td>
<td>peanuts</td>
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<tr>
<td>X</td>
<td></td>
<td>soybeans</td>
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</tr>
<tr>
<td>X</td>
<td></td>
<td>milk (including lactose)</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>nuts</td>
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</tr>
<tr>
<td>X</td>
<td></td>
<td>celery</td>
<td></td>
</tr>
<tr>
<td>X</td>
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</tr>
<tr>
<td>X</td>
<td></td>
<td>sesame seeds</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>sulphur dioxide and sulphites (&lt;10 mg/kg)</td>
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</tr>
<tr>
<td>X</td>
<td></td>
<td>lupin</td>
<td></td>
</tr>
<tr>
<td>X</td>
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<td>mollusks</td>
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Updated: March 9, 2012