**OPTIMPHOS®**
(Phytase)

**OPTIMPHOS® 2500 G/OPTIMPHOS® 5000 G (Granulate)**
**OPTIMPHOS® 2500 CT /OPTIMPHOS® 5000 CT (Coated)**
**OPTIMPHOS® 2500 L/OPTIMPHOS® 5000 L (Liquid)**

**COMPOSITION**

<table>
<thead>
<tr>
<th>Content</th>
<th>OptiPhos® 2500 G</th>
<th>OptiPhos® 5000 G</th>
<th>OptiPhos® 2500 CT</th>
<th>OptiPhos® 5000 CT</th>
<th>OptiPhos® 2500 L</th>
<th>OptiPhos® 5000 L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min 6-phytase activity per gram/ml</td>
<td>2500 OTU&lt;sup&gt;*&lt;/sup&gt;</td>
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<sup>*</sup>1 OTU is the amount of enzyme that catalyzes the release of 1 micromole of inorganic phosphate per minute from 5.1 mM sodium phytate in pH 5.5 citrate buffer at 37°C, measured as the blue Pmolybdate complex color at 820nm.

**MODE OF ACTION**

Phytase is an enzyme, which degrades phytic acid. The main action of phytase is hydrolysis of the phosphate groups from the phytic acid molecule, so free phosphate molecules come available for the animal to be uptaken in the small intestine. Phytic acid as such cannot be digested by the animal. Besides containing Phosphate, phytic acid forms insoluble complexes with protein, starch, fatty acids and ions such as calcium, magnesium and iron in the intestines. The bond nutrients in this complex are unavailable for the animal’s digestive tract. For this reason phytic acid is determined as an anti-nutrient factor. When phytase has hydrolysed at least 2 phosphate groups from the phytic acid, the phytic acid is no longer capable of forming this complex with nutrients. Phytic acid is found in many vegetable raw materials used in feed, such as corn and corn products, wheat, legumes, soya bean and other grains. The use of phytase in feed reduces the need for adding amount of added inorganic Phosphorus (from MCP or DCP) to the feed. Also it eliminates the forming of insoluble complexes and thus improves the utilization of nutrients macro- and microelements.

**USE**

The product is used as an additive in combined feedstuffs minimal containing 0.23% of Phytin bound Phosphorus. It is used in feeds for all categories of poultry and pigs with the purpose of degrading the phytate phosphorus and its subsequent digestion by the animals, as well as improving the utilization of other nutrients, such as proteins, calcium, microelements and amino acids.

**CONTRAINdications**

Not applicable.

**MODE OF ADMINISTRATION**

To be used in feed after full mixing with compound feeding stuff at the recommended dosage.
TARGET SPECIES
Pigs and poultry.

**DOSAGE**

<table>
<thead>
<tr>
<th>Species</th>
<th>Min. activity per kg of complete feedingstuff</th>
<th>Recommended inclusion rate, g/ton feed</th>
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<tbody>
<tr>
<td></td>
<td>OptiPhos® 2500 G</td>
<td>OptiPhos® 5000 G</td>
</tr>
<tr>
<td>Pigs</td>
<td>250 OTU/g</td>
<td>100</td>
</tr>
<tr>
<td>Broiler chickens</td>
<td>250 OTU/g</td>
<td>100</td>
</tr>
<tr>
<td>Layers</td>
<td>125 OTU/g</td>
<td>50</td>
</tr>
</tbody>
</table>

**SIDE EFFECTS**
Not established.

**WITHDRAWAL PERIOD**
Not applicable.

**STORAGE**
To be stored in the original packaging, well closed, in a dry place at room temperature.

**PACKAGING**
Multi-layer paper bags with internal polyethylene bag of 20 kg.

**WARNING**
May cause sensitization by inhalation. Wear personal protective devices such as particle filter mask, rubber gloves, safety glasses and protective clothing while handling the product.