**DATA SHEET**

**Description**

**Leader® Beta-carotene** consists of red or red-brown beadlets, with few white spots of food starch. The microencapsulated beadlets are manufactured with advanced spray and starch drying technology. Each particle containing beta-carotene is finely dispersed in the matrix of gelatin and sucrose, coated with corn starch. Ascorbyl palmitate and di-alpha-tocopherol are added as antioxidants.

**Product Identification**

- **Synonym**: β, β-carotene
- **CAS No.**: 7235-40-7
- **EINECS No.**: 230-636-6
- **INCI name**: Carotene E No. E 160a Chemical

**Structure**

![Chemical Structure of Beta-carotene]

**Chemical Formula**: C₄₀H₅₆  Molecular Weight: 536.85

**Specifications**

- **Appearance**: red or red-brown beadlets
- **Beta-carotene content**: min. 10.00%
- **Lose on drying**: ≤ 8.00 %
- **Heavy metals (as Pb)**: ≤ 0.001%
- **Arsenic**: ≤ 0.0003%
- **Density (US Standard sieves)**: 100% per mesh # 20, 60 % per mesh # 40

**Benefits**

- **Precursor of vitamin A**
- **Stimulate the growth of mammary glandular cells of dairy cows, and increase milk yield**
- **Improve the fertility of cows, sows, breeding horses, and poultry breeders**
- **Possess strong anti-oxidation property and boost immunity of cows, calves, sows, poultry, and race horses, dogs, cats, etc.**
Direction for Use

1. For Ruminants

<table>
<thead>
<tr>
<th>Ruminants</th>
<th>Leader Beta-Carotene gram / head / day</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diary Cows / Heifers</td>
<td>3 g – 5 g</td>
<td>For 2 weeks prepartum until pregnancy is confirmed, especially when intake of green forage is low</td>
</tr>
<tr>
<td>Calves / milk replacer, 0 - 3 months</td>
<td>1 g</td>
<td>For 3 weeks after milk feeding</td>
</tr>
</tbody>
</table>

2. For Other Animals

<table>
<thead>
<tr>
<th>Others</th>
<th>Leader Beta-Carotene gram / head / day</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sows</td>
<td>3 g</td>
<td>Feed per sow per day after weaning until conception is confirmed</td>
</tr>
<tr>
<td>Breeding Horses / Race Horses</td>
<td>4 g – 8 g</td>
<td>Start from 4 weeks before parturition until 10 weeks after parturition</td>
</tr>
</tbody>
</table>

Storage and Stability
The product may be stored for 24 months from the date of manufacture in the unopened original container and at room temperature. It should be protected from light, heat, oxygen and moisture. Keep the container tightly closed. Once opened, use contents quickly.

Safety
This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

Legal notice
The information given in this DATA SHEET is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.