Description
As an excipient and nutraceutical ingredient, Innophos calcium phosphates give you the flexibility to deliver calcium and phosphorus with the most effective combination of dissolution, bioavailability and mouth feel to make your formulations a market success.

Product Commercial Range
As an excipient and ingredient in dietary supplements, calcium phosphates offer unique advantages:
- A product range tailored to your excipient needs
- Combined calcium/phosphorus delivery at Ca:P ratios comparable to those found in the healthy body
- High potency elemental calcium deliverable at dosage levels comparable to calcium carbonate and higher than calcium citrate
- Bioavailability equivalent to milk

Innophos calcium phosphates are available in a range of grades to support your specific formulation requirements, including tableting, wet granulation and vitamin premixes:

<table>
<thead>
<tr>
<th>Calcium Phosphate Product</th>
<th>Calcium Content (%)</th>
<th>Phosphorus Content (%)</th>
<th>Compressibility</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI-TAB® di calcium dihydrate granular</td>
<td>23</td>
<td>18</td>
<td>Very good</td>
<td>Many – The workhorse of the dietary supplement industry for over 30 years</td>
</tr>
<tr>
<td>A-TAB® di calcium anhydrous granular</td>
<td>29</td>
<td>22</td>
<td>Best</td>
<td>Ideal for small tablets and where added tablet stability is needed</td>
</tr>
<tr>
<td>TRI-TAB® tricalcium anhydrous granular</td>
<td>38</td>
<td>17</td>
<td>Good</td>
<td>Perfect for products where higher calcium content is desired</td>
</tr>
<tr>
<td>TCP-DC™ tricalcium phosphate</td>
<td>35</td>
<td>16</td>
<td>Excellent – directly compressible formulas for direct compression</td>
<td>Chewable tablets, antacids and calcium supplements with TRI-TAB®</td>
</tr>
<tr>
<td>Calipharm® D di calcium dihydrate powder</td>
<td>23</td>
<td>18</td>
<td>–</td>
<td>Ideal for nutritional drinks, vitamin premixes, triturations</td>
</tr>
<tr>
<td>Calipharm® A di calcium anhydrous powder</td>
<td>29</td>
<td>22</td>
<td>–</td>
<td>Excellent for chewable multivitamins, vitamin premixes</td>
</tr>
<tr>
<td>Calipharm® T tricalcium anhydrous powder</td>
<td>38</td>
<td>17</td>
<td>–</td>
<td>Choice for calcium phosphorus fortifications</td>
</tr>
</tbody>
</table>
Calcium Phosphates

Excipients and Minerals

Commitment to Research

Innophos’ ongoing research has ensured that our products meet the needs of the world’s evolving health and nutrition demands. In addition to our internal research facilities, Innophos maintains academic research partnerships, such as the Osteoporosis Research Center of Creighton University, to continually support our customers with the products and services needed to provide high-performance nutritional supplements.

The latest science on calcium phosphates and bone health:

2000
◆ Bioavailability of calcium from calcium phosphate in humans is comparable to milk.

2001
◆ Dual calcium and phosphorus nutrient source promotes tissue and bone health in animals.

2002
◆ Elevated serum phosphorus level with calcium phosphate vs. calcium carbonate.
◆ High levels of calcium taken without phosphorus can induce a further phosphorus deficiency.

2004 – 2007
◆ NIH human clinical trial completed to investigate osteoporosis drug and calcium carbonate vs calcium phosphate co-therapy. Tricalcium phosphate was effective and safe at increasing bone density in older women.

2010
◆ VersaCAL® Clear Bioavailability Study – Creighton University – demonstrated VersaCAL® Clear bioavailability and a good source of calcium fortification for beverages.

2011 – 2012
◆ Tricalcium Phosphate benefits Probiotic bacteria’s survival in human gut – University of Florida – also showed less gut discomfort than calcium carbonate.