



Calcium Phosphates

Delivering Ingredient Solutions



Solutions for the Pharmaceutical Industry

Univar Solutions provides you access to an unrivalled portfolio of pharma ingredients through our strong partnership with many of the world's leading producers.

Univar Solutions is proud to promote the comprehensive range of Calcium Phosphates from Innophos within our Pharma ingredients portfolio.

Innophos has been manufacturing high quality calcium phosphates in its U.S. plant for the last 80 years and is a global leader in specialty phosphates. All products are manufactured under GMP and FDA guidelines and are compliant with current EU regulation. DMF are available for A-TAB®, DI-TAB® and TRI-TAB®.

Innophos has a patent for the products NutraTab™ and TRI-TAB PVP™. Innophos has now developed a new co-granulated product A-TAB MD™.



Customer needs drive our activities

- Security of supply - peace of mind
- Supplier approval process - removing risk
- The leader in safety environmental management and product stewardship
- Helping you manage risk associated with single source products
- Warehouse storage close to where you need it - removing supply chain interruptions

Leading service standards

- Assured supply of your key ingredients
- Customer service - focused professionals providing expertise and personal touch
- Expertise in vendor and inventory management
- Offering comprehensive support and timely communication to ensure regulatory compliance

Supply Chain Innovation

- Global procurement - sourcing of new and innovative products
- Cost effective logistics and location control warehouses

Serious About Quality

- ISO 9001 Certified Quality Management System
- Comprehensive GDP Training programme and GDP compliant warehousing
- REACH compliance expertise
- GMP compliant suppliers
- Marketing Authorisation Holder

Why choose our Calcium Phosphates?

- Range tailored to your excipient needs, a wide variety for both wet granulation and direct compression
- Products delivering Ca in levels comparable to calcium carbonate and higher than calcium citrate
- Combined Ca / P at ratios found in the healthy body and with bioavailability equivalent to milk
- Ongoing commitment to research to meet the world's evolving health and nutrition demands

Enhance the compressibility, hardness, and shelf-life of your tablets and the Ca / P delivery of nutritional supplements with our DI-TAB®, A-TAB® and TRI-TAB® granular phosphates.

- White, odorless, and tasteless granules for direct compression tableting and as a source of Ca and P in nutritional supplements and medicines
- Relative insensitivity to lubrication
- Excellent consolidation properties and flow rates
- Dual Ca and P supplementation helps maintain their healthy levels in the body and promotes tissue and bone health

Replacing multiple excipients with unique co-processed excipients from Innophos - TRI-TAB PVP™, NutraTab™ and A-TAB MD™

- TRI-TAB PVP™ is Tribasic Calcium Phosphate (TCP) coated with Polyvinylpyrrolidone (PVP) and NutraTab™ is TCP coated with Guar Gum
- A-TAB MD™ is Dicalcium Phosphate Anhydrous coated with Maltodextrin
- All are white, odorless and tasteless granulated solids
- TRI-TAB PVP™ and A-TAB MD™ in pharmaceutical formulations and NutraTab™ used in nutritional supplements are unique multifunctional excipients that can replace several individual excipients and help with enhancing compressibility, improved flowability and overall improvement in tablet robustness.
- TRI-TAB PVP™ and NutraTab™ have calcium levels comparable to calcium carbonates, however Calcium phosphates can serve as better choice for bone health supplements over Calcium carbonate
 - Excellent as supplement for bone health, offers both Ca and P in the same ingredient system compared to Calcium carbonate. Several publications indicates that both Ca and P are essential for bone health.
 - Reduced chalkiness as compared to Calcium carbonate and offers better mouth feel
 - Avoids hardening of tablets over time as usually experienced with Calcium carbonates

| PRODUCT | CHEMICAL NAME | CA (%) | P (%) | EP / USP COMPLIANCE | EC COMPLIANCE | TABLETING PROCESS | APPLICATIONS |
|---------------------|---|--------|-------|---------------------|---------------|--------------------|---|
| A-TAB® Granular | Dicalcium Phosphate Anhydrous CAS 7757-93-9 | 29 | 22 | ● | ● | Direct Compression | Filler/Binder for pharma- and nutraceuticals, high Ca/P content, ideal for small tablets and stable formulations. |
| DI-TAB® Granular | Dicalcium Phosphate Dihydrate CAS 7789-77-7 | 23 | 18 | ● | | Direct Compression | Filler/Binder in pharmaceutical applications and used as Ca and P supplementation |
| TRI-TAB® Granular | Tricalcium Phosphate Anhydrous CAS 12167-74-7 | 38 | 17 | ● | | Direct Compression | Filler in pharmaceutical applications with highest Ca concentration for Ca and P supplementation |
| Nutra Tab™ | Tricalcium Phosphate & Guar Gum CAS 12167-74-7 & 9000-30-0 | 35 | 16.6 | | ● | Direct Compression | Multifunctional excipient with superior binding for chewable and conventional nutraceutical tablets. Simplifies formulations. Increases process efficiency and tablet hardness. Reduces tablet size. Ideal for high potency calcium supplements |
| TRI-TAB PVP™ | Tricalcium Phosphate & PVP CAS 12167-74-7 & 9003-39-8 | 35 | 16.6 | ● | | Direct Compression | Multifunctional excipient with the same benefits as Nutra Tab™ for pharmaceutical formulations with a relatively fast dissolution profile. |
| A-TAB MD™ | Dicalcium Phosphate Anhydrous & Maltodextrin CAS 7757-93-9 & 9050-36-6 | 23 | 18 | ● | | Direct Compression | Multifunctional excipient like Nutra Tab™ for pharmaceutical formulations giving extremely hard tablets. |
| Calipharm A® Powder | Dicalcium Phosphate Anhydrous CAS 7757-93-9 | 29 | 22 | ● | | Wet Granulation | Filler for pharmaceuticals with high Ca and P content. |
| Calipharm D® Powder | Dicalcium Phosphate CAS 7789-77-7 | 23 | 18 | ● | | Wet Granulation | Filler in pharmaceutical applications and used as Ca and P supplementation |
| Calipharm T® Powder | Tricalcium Phosphate Anhydrous CAS 12167-74-7 | 38 | 17 | ● | | Wet Granulation | Filler in pharmaceutical applications with highest Ca concentration for Ca and P supplementation |



Contact:

For more information on this range of Calcium Phosphates please contact your local Univar Solutions representative at **pharmaEMEA@UnivarSolutions.com**