

The Pinnacle of excellence in excipients



Pharmacin/Aurobindo

Pharmacin was founded in 1986 and has been active in the field of pharmaceutical raw materials. In 2006, Pharmacin has become a 100% subsidiary Aurobindo Pharma Ltd. Meanwhile Pharmacin has expanded its activities in the field of excipients and nutraceutical ingredients and is a major supplier for the pharmaceutical, veterinary, food, nutraceutical and cosmetic industry in Europe.

All of our activities are in line with current GMP/GDP directives. Pharmacin is fully compliant with the Falsified Medicines Directive.

Our partner Crest Cellulose is part of the Aurobindo Ltd Group, has robust infrastructure and broad technical strengths, capable of manufacturing a wide range of excipients and ingredients for the highly demanding pharma and food segments.

As part of the company's strategy they also formulate new products, a continuous process of research and development is undertaken by their expertise scientists while the quality and integrity of every product is ensured by our regulatory team as per international Pharmacopeia standards and specifications.

Advantage of working with Pharmacin/Crest:

- Integrated Product R&D
- Customization and pilot scale production
- Stringent Quality Standards
- Superior Product Characteristics
- Capable of manufacturing wide range of excipients for various industries segments

MAGNESIUM STEARATE

Magnesium stearate has lubricating properties, preventing ingredients from sticking to manufacturing equipment during the compression of chemical powders into solid tablet. It is the most commonly used lubricant for tablets and is also used to bind sugar in hard candies like mints. Magnesium stearate is hydrophobic and may retard the dissolution of a drug from a solid dosage form; the lowest possible concentration is therefore used in formulations.

Characteristics

- An effective lubricant for optimum product strength (tablet & capsule lubricant).

Applications of the Product

- Primarily used as a lubricant in capsule and tablet formulations at concentrations between 0.25-5.0%



PREGELATINIZED MAIZE STARCH

Pregelatinized maize starch is suitable as a multifunctional excipient like binder, diluent and disintegrant. It is used in direct compression tablet formulations, wet granulations and capsule formulations and occurs as a moderately coarse to fine, white to off-white coloured powder. It is odourless and has a slight characteristic taste.

Characteristics

- Combines several properties of the excipients in a single product. (tablet & capsule diluent, disintegrant and tablet binder)

Applications of the Product

- Used in pharma/ nutraceutical industry as binder, disintegrant. (oral dry powder and hard capsules formulation)
- Food manufacturing industry for processing and as food thickeners or stabilizers (instant puddings, soup mixes, etc.).



SODIUM STARCH GLYCOLLATE

Sodium starch glycolate (SSG) has the ability to absorb water, making it a rapid disintegrant. It is used as a disintegrant in capsule and tablet formulations and is recommended to use in tablets prepared by either direct-compression or wet-granulation processes. The usual concentration in a formulation is between 2%- 8% with an optimum of about 4%. The effectiveness of many disintegrants is affected by the presence of hydrophobic excipients such as lubricants but the disintegrant efficiency of SSG is unimpaired. Increasing the tablet compression pressure also appears to have no effect on disintegration time.

Characteristics

- A super disintegrant meeting by rapid uptake of water followed by rapid and enormous swelling (tablet & capsule disintegrant).

Applications of the Product

- Suitable for a variety of tablet and capsule formulations.
- In higher concentrations, it can act as a dissolution enhancing agent.
- Disintegrant efficiency is unimpaired in presence of other hydrophobic excipients in the formulation.



CROSCARMELLOSE SODIUM

Croscarmellose Sodium (CCS) aids in the disintegration and dissolution of pharmaceutical and dietary supplement tablets, capsules, and granules and results in high-quality super disintegrant. Its characteristic of faster disintegration makes it known as super disintegrant. Insoluble in water, although CCS has exceptional swelling properties rapidly and swells to 4–8 times its original volume on contact with water. CCS at concentrations up to 5% w/w may be used as a tablet disintegrant, although normally 2% w/w is used in tablets prepared by DC and 3% w/w in tablets prepared by a wet-granulation process.

Characteristics

- A fine disintegration offering better product compliance (tablet & capsule disintegrant).

Applications of the Product

- Found to be effective when used in intra granular or extra granular portion of the formulation.
- Super disintegrant due to the rapid water penetration into tablets result is a strong disintegration force.
- Used in both direct-compression and wet granulation.



DICALCIUM PHOSPHATE

Dicalcium phosphate, also known as dibasic calcium phosphate or calcium monohydrogen phosphate, is practically insoluble in water. It contains about 29.5 percent calcium in its anhydrous form. Anhydrous dibasic calcium phosphate is a white, odourless, tasteless powder. It is used in pharmaceutical products because of its compaction properties, and the good flow properties.

Characteristics

- A good additive with superior binding properties (tablet & capsule diluent).

Applications of the Product

- It is also used in pharmaceutical products because of its compaction properties, and the good flow properties of the coarse-grade material.
- In the food industry, it is used as leavening agent, dough modifier, buffer, nutritional supplement, emulsifier and stabilizer.



MICROCRYSTALLINE CELLULOSE

Microcrystalline Cellulose (MCC) is one of the most important and widely-used excipient. It functions as a diluent in formulations and an important component for oral dosage. Other tailor made grades as required by the formulator can be requested.



MCC Grade	Nominal Mean Particle Size (µm)	Particle Size Analysis		Moisture Content (%)	Application	Remarks
		Mesh Size	Amount Retained (%)			
PH 101	50	60	≤ 1.0	≤ 5.0	Conventional grade for wet and dry granulation	Most widely used for direct compression tableting, wet granulation and spheronization; also used in capsule filling processes. Can Be used in Direct Compression, wet granulation & drygranulation, Extrusion Spheronization
		200	≤ 30.0			
PH 102	100	60	≤ 8.0	≤ 5.0	Improves flow in direct compression, dry phase of wet granulation and dry granulation	Used as PH 101 but larger particle size improves flow of fine powders Can Be used in direct compression, wet granulation & drygranulation
		200	≥ 45.0			
PH 112	100	60	≤ 8.0	≤ 1.5	Lowest moisture content and is best suited for direct compression of moisture sensitive actives	Same particle size as PH-102; much reduced moisture content (1.5%); used where very moisture sensitive pharmaceutical active ingredients are present. Can Be used in Direct Compression & Drygranulation
PH 200	180	60	≤ 10.0	≤ 5.0	Largest particle size, enhances flow in direct compression and dry granulation whilst maintaining high levels of compressibility with minimum weight variation and content uniformity	Large particle size with increased flowability; used to reduce weight variation and to improve content uniformity in direct compression formulations and (as a final mix additive) in wet granulation formulations. Can Be used in Direct Compression, wetgranulation & Drygranulation
		200	≤ 50.0			
PH 301	50	60	≤ 1.0	≤ 5.0	High bulk density grade, for manufacturing of small tablets. Reduces powder stratification and tablet weight variation by allowing efficient mixing	Same particle size as PH-101 but more dense providing increased flowability, greater tablet weight uniformity, the potential for making smaller tablets, and improved mixability; useful as a capsule filling excipient. Can Be used in Direct Compression, wet granulation & drygranulation, Extrusion Spheronization
		200	≤ 30.0			
PH 302	100	60	≤ 8.0	≤ 5.0	High bulk density grade with larger particle size, used for production of thin tablets especially in high dose drug formulations. Avoids powder segregation and achieves good flow rates	Same particle size as PH-102 but more dense providing increased flowability, greater tablet weight uniformity, the potential for making smaller tablets, and improved mixability; useful as a capsule filling excipient. Can Be used in direct compression, wet granulation & drygranulation
		200	≤ 45.0			

REGULATORY INFORMATION

- An integrated Quality Management System (QMS), regularly re-evaluated by recognized authorities, ensures that products comply with all appropriate standards.
- Analytical certificates are issued with compliance to the principal pharmacopeia monographs: USP/NF, BP, Ph. Eur, JP. & IP.
- Professional audit in-house group provides an inclusive service for all our pharmaceutical ingredients making compliance to regulatory bodies.
- Certificate of suitability (CEP) from the European Directorate for the Quality of Medicines (EDQM) for all its excipients.
- WHO, GMP and Drug License registration.
- Endeavour to adhere to all regulatory norms that are required for all pharmacopeia standards & Food Regulations.
- Certified by ISO 9001, 14001, 18001 & 22000 Certifications.
- Certified by Kosher and Halal Certification.



Manufacturing Capabilities

- State-of-the-art facility conforming to cGMP standards with most advanced equipments to manufacture a broad range of excipients.
- Customisation and pilot scale production ensures early stage samples for Pharma R&D.
- Faster scale-up from laboratory to production for customized products.



Free your mind and contact Pharmacin for more information!



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