

**Capsuline**[®]
Since 2002

Delayed Release Vegetarian Capsules



Delayed Release

Vegetarian Capsules

Health Industry dosage form solution

Capsuline Delayed Release vegetarian capsules are a groundbreaking type of HPMC capsules that can help safeguard the dietary supplement ingredients from gastric acid minimizing expenses and extra testing processes associated with incorporating acid-resistant features during the manufacturing process. Capsuline Delayed Release capsules can also serve to mask odors and diminish unpleasant aftertastes, all without the need for costly coatings.

Manufactured with precision and attention to quality, Capsuline's Delayed Release capsules offer a versatile solution for formulators and manufacturers looking to create products that align with the evolving preferences of health-conscious consumers. Whether used in pharmaceuticals, nutraceuticals, or other applications, Capsuline Delayed Release capsules open up new possibilities for innovative and effective dosage forms. Embrace the future of encapsulation with capsules that prioritize both the effectiveness of ingredients and digestive wellness.



Excellent choice to encapsulate Probiotics

Our delayed-release hard two-piece capsules are the perfect solution for encapsulating probiotics. With their delayed-release design, these capsules



Safeguard probiotic strains, allowing them to bypass the harsh stomach environment and reach the intestines, where they can flourish and offer maximum benefits to the digestive system.



Provide a reliable delivery system for probiotics, ensuring their potency and efficacy.



Target gut health support enhancing the absorption of probiotics.

Features of Delayed Release Capsules

Delayed release capsules offer several distinctive features that set them apart from traditional immediate-release capsules. Here are some key features:



Controlled Release Mechanism

The primary feature of delayed release capsules is their controlled release mechanism. These capsules are designed to release their contents in a gradual and controlled manner, typically after a specific period or in a specific part of the digestive system.



Protection of Ingredients

One of the main advantages is the ability to protect sensitive or reactive ingredients from the harsh acidic environment of the stomach. By delaying the release until the capsule reaches the intestines, where the pH is less acidic, the ingredients are better preserved and can be more effectively absorbed.



Enhanced Bioavailability

Delayed release capsules contribute to enhanced bioavailability by ensuring that the active ingredients are released at the optimal site for absorption in the gastrointestinal tract. This can lead to improved therapeutic outcomes as the body can better utilize the encapsulated substances.



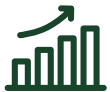
Reduced Gastrointestinal Irritation

Some ingredients may cause irritation or discomfort in the stomach. Delayed release capsules can help mitigate this by releasing their contents in the intestines, minimizing the potential for gastrointestinal irritation.



Improved Stability

The delayed release technology contributes to the stability of encapsulated substances. This can be crucial for formulations containing sensitive compounds, such as probiotics, enzymes, or certain drugs that may degrade or lose efficacy in the acidic environment of the stomach.



Customizable Release Profiles

Manufacturers have the flexibility to customize the release profiles of delayed release capsules. This allows for precise control over when and where the contents are released, catering to the specific needs of different formulations and optimizing therapeutic effects.



Versatility in Formulation

Delayed release capsules are versatile and can be used in various applications, including pharmaceuticals, nutraceuticals, and dietary supplements. This versatility makes them an attractive option for formulators seeking innovative dosage forms.



Consumer Convenience

For individuals who may experience discomfort with immediate-release formulations, delayed release capsules offer a more comfortable option. They can be easier on the stomach and digestive system.

**Certified Kosher and Halal and manufactured
in cGMP facility to guarantee quality.**



Dissolution

Based on our proprietary analysis, our delayed capsules typically break down within an average time of 30 minutes. The exact duration may differ based on the stomach pH of each individual.

Comparative Delayed Release Capsules / Size "0"

Supplier	Rupture time (min) in HCL pH 1,2 Empty capsules with disks			Rupture time (min) in HCL pH 1,2 Capsules filled with colored lactose with disks, Average			Disintegration time (min) in buffer pH 6.8 Empty capsules with disks, average		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Capsuline	69	90	82	23	37	30	8	10	9
Competitor A	14	45	30	10	27	18	9	21	12
Competitor B	55	67	63	34	42	38	15	17	16

Storage

Capsuline's delayed-release vegetarian capsules



Storage Recommendation

59°F (15°C) - 86°F (30°C)



Relative Humidity

Between 35% and 70%