



FLOZEIN PRODUCTS FOR PHARMACEUTICAL/NUTRACEUTICAL

PROTECTIVE COATING | ENCAPSULATION | ENTERIC COATING
EXTENDED RELEASE | TASTE MASKING | PROTECTION FROM DECAY AND SPOILAGE

FloZein Products is the world leader in the manufacture of innovative, vegan coatings for the pharmaceutical and nutraceutical industries.

Zein is a water-insoluble protein extracted from corn. It is unique in its ability to form odorless, tasteless, clear, hard and almost invisible edible films.

FloZein is:

- ◆ Generally Recognized as Safe (GRAS) by the USFDA
- ◆ Vegan, GMO-free, © Kosher, and Halal compliant
- ◆ Clean label, containing no additives or preservatives
- ◆ Gluten, lactose, and sugar-free
- ◆ Generally unreactive with micronutrients or active ingredients
- ◆ USP monograph compliant (pharmaceutical grade)
- ◆ Digestible and biodegradable
- ◆ Manufactured in the USA



FloZein Products can address your specific coating and encapsulation challenges with our line of Zein combination products. Ingredients such as colors, flavors, plasticizers, and emulsifiers can be easily mixed into the product. Refer to the reverse side for addition application guidance.

FloZein offers many advantages over shellac (pharmaceutical glaze):

- ◆ Requires fewer coats and dries faster, reducing production time and cost
- ◆ Extended shelf-life, particularly under high-humidity and high-heat conditions
- ◆ More effective as a moisture and oxygen barrier
- ◆ More resistant to bacterial attack, which frequently decomposes other proteinaceous material
- ◆ A better coating for troublesome raw materials such as hygroscopic ingredients that pick up moisture easily
- ◆ Cost effective since less product is needed in solution

Vegan | Non-allergenic | Gluten, Lactose, Sugar-free | Non-GMO | © Kosher | Made in USA

For Additional Information and Samples

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Pharmaceutical/Nutraceutical Applications	FloZein™	Cozeen™	VPP
Pharmaceutical glaze for tablets, gel caps, and capsules: Colors, flavors, plasticizers, and emulsifiers may be mixed in.	✓	✓	
Encapsulation (micro and nano): Protective barrier against loss of internal moisture and the external effects of oxygen and microbes.	✓		
Taste Masking: Unpleasant tasting ingredients can be encapsulated, which are then broken down by enzymes in the mouth or intestine to permit product release.	✓	✓	✓
Enteric coating: Protects active ingredients from attack by stomach acids.	✓	✓	
Time Release: Coats active ingredients for time release preparations.	✓	✓	
Excipient for active ingredients	✓		
Tablet “Slip”: Smooth finish allows greater ease in swallowing.	✓	✓	✓
Adhesive: Although fast drying, when applied, FloZein has tackiness, allowing for the introduction of inclusions (e.g., flavors, additives).	✓	✓	
Coating of porous items like nutrient gummies; prevents clumping.		✓	
Moisture retention barrier for both gummies and single dose pills, caplets & capsules.	✓	✓	✓

FloZein: Prolamine from corn. Available in food and pharmaceutical (USP compliant) grades.

Cozeen: A proprietary Zein and palm oil combination coating. It exhibits excellent moisture barrier properties, and it is somewhat more hydrophobic than a simple Zein film. It will fill any possible micropores that can occur in an ultra-thin film, providing an almost impervious coating to air and moisture for porous products. Cozeen is available in a ready-to-use liquid or a paste which must be solubilized in an ethanol/water solution.

VPP (Vegetable Protein Product): A water-suspendable mixture of corn prolamine and guar gum.

FloZein Products



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