



HARKE

Pharma & Nutra

Herbal Extract Formulation:
Capsule, Stick Pack or Tablet.
The Choice is Yours.



Oral Solid
Dosage Forms

We offer dedicated excipients and technical support to help formulating herbal extracts into solid oral dosage forms.



YOUR DOSAGE FORM EXPERTS



Herbal extracts are usually found in a liquid or powder form, which used to dictate the final dosage form. With the advent of highly functional excipient, liquids can be converted to powders. Further, powders that were destined to be filled into capsules can now be compacted into economically desirable tablets.

Herbal Extracts in Capsules

Common challenges

In general capsule filling is a straight forward and very robust process. Once desired powder blend flowability and/or cohesiveness is adjusted, production is likely to run smoothly. Regardless of the capsule shell material (gelatin, HPMC, pullulan, etc.), moisture transfer between the powder blend and the capsule shell must be avoided.

If the powder moisture is not correctly adjusted, shell softening or increased shell brittleness may result in product failure.

The following excipients have a proven track record in successful capsule formulations and help to balance the desired and necessary powder properties:

Function	Trade Name	Generic Name
Disintegrant	PolyKoVidone®	Crospovidone
Filler	Chemical® PH-101	MCC
Filler	Chemical® PH-102	MCC
Filler, Oil Absorber	galenIQ™ 72x and 80x and 960	Isomalt
Flow aid and Oil Absorber	Omyanutra® 300	Calcium Carbonate and Calcium Phosphate
Flow Aid, Lubricant	ROSE TALC	Talc
Flow Aid, Lubricant	TALC MS	Talc

Herbal Extracts in Stick Packs

Common challenges

In order to fill a powdered extract into a stick pack, flowability of it must be ensured. Today developers can easily choose from a variety of flow-enhancing excipients.

Further, crucial attributes such as mouthfeel and taste can be tailored to customer needs by the excipient selection

Function	Trade Name	Generic Name
Disintegrant	PolyKoVidone®	Crospovidone
Filler	galenIQ™ 72x and 80x and 960	Isomalt
Flow Aid	Omyanutra® 300	Calcium Carbonate and Calcium Phosphate
Flow Aid, Lubricant	ROSE TALC	Talc
Flow Aid, Lubricant	TALC MS	Talc



Herbal Extracts in Tablets

Common Challenges

Most herbal extracts are very fine and cohesive in nature which impairs their flowability, eventually leading to tableting issues such as poor content, mass uniformity and limited tableting speed. Sometimes not even a single tablet can be pressed when cohesive material gets stuck and does not flow properly into the die of the tablet press.

Herbal extracts also tend to show elastic recovery leading to tablet defects such as capping and lamination. However, powder flow and powder compactibility can be dramatically improved by means of granulation (dry/wet) or the use of dedicated direct compression excipients.

Recommended Excipients for Granulation

Function	Trade Name	Generic Name
Binder (dry)	KoVidone® VA64	Copovidones
Binder (wet)	KoVidone® K25 and 30 and 90	Polyvinylpyrrolidone (PVP)
Binder (wet)	Tylopur® 606	Hypromellose (HPMC)
Filler, Binder	Chemical® PH-101	MCC
Filler, Binder	galenIQ™ 800 and 801	Isomalt
Filler, Binder	Omyanutra® 300	Calcium Carbonate and Calcium Phosphate

Recommended Excipients for Direct Compression

Function	Trade Name	Generic Name
Filler, Binder	Chemical® PH-102	MCC
Filler, Binder	Primecel® PH-200	MCC
Filler, Binder	Primesolv® SMCC-90	Silicified MCC
Filler, Binder, Oil Absorber	galenIQ™ 720 and 721	Isomalt
Flow Aid, Binder, Oil Absorber	Omyanutra® 300	Calcium Carbonate and Calcium Phosphate
Flow Aid, Lubricant	ROSE TALC	Talc
Flow Aid, Lubricant	TALC MS	Talc



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