MEDI HERB

Excipient Glossary

Tablet Excipients

MediHerb uses a range of low allergenic and pharmaceutical grade excipients in the manufacture of its tablet range. These excipients are carefully chosen using experience gained from over 10 years of manufacturing herbal tablets and are necessary to aid the manufacturing process, stability, disintegration and to allow ease of swallowing.

Calcium Hydrogen Phosphate

Calcium hydrogen phosphate is the binder or filler which actually holds the tablet together and allows it to be compressed to form a tablet. It also assists in formulation flow and resists the uptake of moisture, thus reducing the risk of poor stability.

Cellulose

Cellulose acts with calcium hydrogen phosphate as the binder that holds the tablet together. It also works to assist with tablet disintegration.

Silica

Silica is used as a glidant to assist with the flow properties of the tablet powder as it travels through the tablet machine. Good flow characteristics are crucial to the manufacture of tablets with consistent weight and active content. Silica is also used to increase the hardness of the tablet to ensure they are robust enough to handle coating, packaging and transport.

Sodium Starch Glycollate

Due to the high proportion of herb used in the MediHerb tablets, an aid to disintegration is required to ensure that the tablets disintegrate in less than 30 minutes. Sodium starch glycollate performs this function best for the high potency tablets manufactured by MediHerb.

Magnesium Stearate – Vegetable Origin

Most tablets need some form of lubrication to assist in the removal of the tablet from the tableting machine die. Magnesium stearate of vegetable origin is the most effective ingredient for this purpose.

Orange Oil

Pressed oil from orange peel is used as a flavour masker.

Hypromellose (Cellulose Derivative)

Hypromellose is used as a film coating agent on most MediHerb tablets. It is applied as a thin inert layer and has four important actions:

1. The thin layer makes the tablet much more resistant to dust formation in the packaging.
2. When the tablet surface is wetted in the mouth a lubricant, mucilaginous layer is formed on the tablet which facilitates swallowing.
3. The inert layer acts to hide any unpleasant odours or tastes that are found in many herbal tablets.
4. It aids in enhancing the stability of the product by forming a barrier to the external environment.

Enteric Coating

A number of MediHerb tablets have a specialised enteric coating which makes the tablets acid resistant. This is important for some herbs which can cause gastric discomfort and for herbs whose actives are damaged by stomach acid. Enterically coated tablets pass through the high acid environment of the stomach safely and then dissolve once they reach the pH neutral environment of the small intestine.

Solubility Test

Enterically coated tablets must be stable for 2 hours in dilute hydrochloric acid and then dissolve within 1 hour when placed in pH 7 buffer.

Effervescent Factors

The following ingredients are used in effervescent powders to adjust the pH and give the product fizz.

- **Calcium carbonate** is a naturally occurring mineral, found as the following minerals and rocks: aragonite, calcite, chalk, limestone, marble and travertine.
- **Citric acid (anhydrous)** is naturally occurring in plants and animals.
- **Potassium and sodium bicarbonates** are naturally occurring inorganic minerals.

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