

PetFlax™ Kibble Binder

What is the science behind PetFlax Kibble Binder?

PetFlax™ Kibble Binder is an emulsification ingredient which enhances product durability, while allowing formulators to include 50% or more fresh meat in extruded pet foods. It is a protein hydrocolloid complex that incorporates a unique phospholipid fraction which binds with fresh meat, starches, fiber and other recipe components during the cooking process whether by extrusion, baking or retorting. This unique patented product enhances the cooking while lowering density in high meat extruded pet foods.

What is PetFlax™ Kibble Binder made from?

The hydrocolloid properties are derived in part from a unique flaxseed milling process, which is then combined with a protein/phospholipid complex isolated from a whey protein base. This label friendly, GRAS approved ingredient is protected under its own patent.

What impact does PetFlax™ Kibble Binder have on palatability?

High meat pet foods made with PetFlax™ Kibble Binder have scored extremely well in both dog and cat palatability testing in comparison to a market leading premium dog and cat foods respectively. The ability to add significantly higher levels of fresh meat to dry formulas, and replacing dry meals, imparts a significantly higher acceptance in most formulations.

What is the preferred inclusion rate of PetFlax™ Kibble Binder?

Optimum results can be obtained with recipes containing 35% to 55% meat flow rates when PetFlax™ Kibble Binder is used at rates of 10 to 14% of the meat inclusion levels. This final inclusion rate is dependent on the type, level, moisture, and fat levels of the meat.

PetFlax™ Kibble Binder is a dry, flour-like ingredient similar to rice flour in density and flow ability. The preferred method is to have the meat supplier add the PetFlax™ Kibble Binder during the emulsifying, deboning or comminuting process. This can be done in either a weight loss auger fed process, or in a batch mixer with the PetFlax™ Kibble Binder sprinkled on the meat while mixing. Both will ensure uniform distribution for maximizing the efficacy of the meat blend. Alternatively, it can be added at the manufacturing plant either in a mixer or on a continuous flow process prior to an external scrape surface heat exchanger, and the extruder preconditioner.

In order to optimize the binding capacity of the PetFlax™ Kibble Binder with the fresh meat and dry recipe components, it is important to pump the blend through an auxiliary heat exchanger to raise the temperature to between 40° to 50° C. This process also allows easier pumping into the extruder's preconditioner while enhancing the mixing of the meat with the dry diet ingredients as well as the gelatinization of the recipe starches

What are the effects that PetFlax™ Kibble Binder have on the % Cook?

High cooks of 90%+ have been obtained using the procedures above at fresh meat flow rates of 50% in both no-grain and low-grain diets.

What cost effect does the PetFlax Kibble Binder have on my final formulation of high meat pet food?

PetFlax™ Kibble Binder cost effect will be different on each final cost depending upon the recipe. The cost effect will vary depending on the increased level of fresh meat that can be added as well as the existing ingredients that can be reduced or replaced entirely. Our development work has shown the feasibility of removing the flaxseed as well as the dried meal and dried protein products. In addition the reduction in palatability enhancer systems is also possible.

PetFlax™ Kibble Binder is an exciting ingredient that allows pet food manufacturers to fit a key market need by producing a high fresh meat food for today's marketplace.