

PDGG – Partially De-polymerized Guar Gum. Prebiotic, soluble dietary

## Raw Material

**VIDOFIBRES GF 25 A** (Guar Gum Fibre) is 100% pure guar gum (PDGG – partially de-polymerized guar gum), produced by hydrolyzation, a controlled natural process.

Origin: Switzerland

## Production

**VIDOFIBRES GF 25 A**: Thermal de-polymerization of guar gum powder, drying, milling, sifting.

## Characteristics

Dietary fibre is the edible part of plants or analogous carbohydrates resistant to digestion and absorption in the human small intestine with complete or partial fermentation in the large intestine. Dietary fibre includes polysaccharides, oligosaccharides, lignin and associated plant substances.

**VIDOFIBRES GF 25 A** is a natural, gluten-free (EU limit), prebiotic dietary fibre that provides dietary fibre content, moisture retention and texture to various food products.

**VIDOFIBRES GF 25 A** is a galactomannan based soluble dietary fibre made from thermal de-polymerized guar gum. It is a powder that can be easily added to a wide variety of foods, beverages and supplements and hardly impacts the flavour, colour or texture of the products it is added to. In addition, thermal de-polymerized guar gum is an excellent prebiotic for maintaining digestive health and microflora balance.

**VIDOFIBRES GF 25 A** is a soluble, low-FODMAP fibre. Sources of insoluble fibre are the skins of fruits and grains, nuts, seeds. Soluble fibre dissolves in water, aids digestion, feeds beneficial bacteria, moderates glucose absorption, lowers cholesterol and increases satiety. However, some soluble fibres may lead to additional gas, bloating and loose stools. FODMAPs (Fermentable Oligo-saccharides, Disaccharides, Mono-saccharides and Polyols) are a group of dietary sugars which are poorly absorbed in the small intestine. They are known to cause gas-related pain, intestinal distention and constipation and diarrhoea in people suffering from functional gastrointestinal disorders (FGIDs) and irritable bowel syndrome (IBS). Low-FODMAP diets help to reduce these symptoms.

Guar gum is a water-soluble carbohydrate made from the guar plant seed. It is used in the food industry for its thickening, gelling and stabilizing properties based on its high viscosity. While guar gum and **VIDOFIBRES GF 25 A** come from the same source, **VIDOFIBRES GF 25 A** has a low viscosity and is used as a fibre source rather than a textural ingredient or stabilizer.

De-polymerization is a controlled thermal process that breaks the guar gum down into smaller units, resulting in a much lower viscosity while maintaining the original fibre content.

Guar gum fibre is a prebiotic fibre different from non-galactomannan based fibres; it produces “short-chain fatty acids” (SCFA) in the gut via a fermentation process. Guar gum fibre prolongs the fermentation process resulting in a higher total amount of SCFAs produced over a more extended period, leading to significantly less gas, bloating and discomfort. There are three main types of SCFA; Acetates, Propionates, and Butyrates. The acetates and propionates tend to transfer through the intestine walls and get metabolized in muscle or liver. Still, the butyrates remain in the digestive system, and the beneficial microflora uses these as a food/energy source.

Total dietary fibre content: > 75 %  
of which soluble: 100 %  
of which insoluble: negligible

## Prebiotic, soluble Fibre