

FOOD

VIDOPECTINE®

(Citrus pectin, apple pectin)



Raw Material

VIDOPECTINE (E 440) is extracted from fresh citrus peels or apple pomace.

The characteristic and primary backbone of pectin and the chain-building unit is galacturonic acid, 1,4-linked into the polysaccharide chain, and partially esterified with methanol.

Production

Extraction, Separation, Filtration, Concentration, Precipitation, Drying, Grinding, Sieving, Standardization.

Characteristics

Our **VIDOPECTINE™** pectin product line complements our LBG, guar, tara and fibre offerings to provide our customers with a wide range of solutions that deliver viscosity, gelling, structure, texture, physical stability and protein stability in a wide variety of food applications.

There are three main types of pectin products, divided by their degree of methylation, which influences the specific functional properties of each kind of pectin like for instance the ability to produce their distinct types of gels.

High Methoxyl (HM) Pectin :

These pectins have a greater than 50% degree of methylation. The degree of methylation, abbreviated DM, refers to the number of carboxyl groups that are esterified with methanol on the pectin galacturonic acid backbone. HM pectins need a system containing over 55% solids and a low pH to gel.

Low Methoxyl (LM) Pectin:

This type of pectin has less than 50% DM, meaning that less than 50% of the carboxyl groups are esterified. LM pectins gel in the presence of calcium but also with sugars and acids; however, their distinctive feature is the ability to gel in systems with low soluble solids.

Low Methoxyl Amidated (LMA) Pectin: These types of pectin are similar to the low methoxyl pectins. However, some of the free carboxyl groups are amidated, and thus have -CONH₂ groups on them. LMA pectins also require calcium ions to gel, though usually far less than LM pectins. LMA pectins are ideal for certain types of jams and fruit preparations, as well as yoghurts.

Pectins are widely used to add viscosity and mouthfeel to beverages, sauces, and dips. The pectin is also able to build back body in low calorie, low sugar, or diet beverages.

Gelling

Viscosity

HM citrus pectin is uniquely suited for providing stability to protein-based and heated low pH beverages, including yoghurt drinks, acidified milk-juice drinks and acidified soy or whey juice drinks.

Protein Stabilization

The **VIDOPECTINE** product range is designed for all major food applications

VIDOPECTINE RS, MRS, Slow Set	Jams, Jellies, Marmalades, Preserves
VIDOPECTINE DH	Dairy; Acid Dairy Drinks, Acid Soy Drinks
VIDOPECTINE DC, DA	Dairy; Yoghurt, White Mass
VIDOPECTINE V	Beverages
VIDOPECTINE C	Confectionery
VIDOPECTINE B	Bakery
VIDOPECTINE F	Fruit
VIDOPECTINE G	Glazes.

Benefits

All **VIDOPECTINE** products are rigorously controlled, standardized and tested in specific application test methods.

VIDOPECTINE from citrus peels:

- Brittle, firm gel structure.
- Excellent clarity.
- Firm set.
- Brilliant cut.
- Protein stabilization.

VIDOPECTINE from apple pomace:

- Smooth and reversible gel structure.
- Less tendency of syneresis.
- Tolerant to Calcium ions.

Areas of use

Area	Product Group	Functions / Benefits
Fruit Spreads	Jams, Jellies, Fruit preparations, Marmelades, Preserves	<ul style="list-style-type: none"> • Gels to provide texture. • Fruit or peel distribution/suspension. • A wide variety of setting speeds and setting temperatures are available for a range of solids ranges.
Beverages	Fruit Juice Drinks Diet Juice Drinks etc.	<ul style="list-style-type: none"> • Adds viscosity and provides mouthfeel. • helps with the suspension of particles.
Low pH Protein Beverages	Drinking Yoghurts Smoothies Acid Milk Juice Drinks Acid Soy / Whey Protein Juice Drinks	<ul style="list-style-type: none"> • Protects protein during heating. • Provides stability, mouthfeel and good flavour release.
Confectionery	Gummies, Fruit jellies, Pastilles	<ul style="list-style-type: none"> • Gels and provides a variety of short to more chewy textures. • Excellent flavour release.
Bakery	Bake stable fruit fillings Toppings and Preparations	<ul style="list-style-type: none"> • Provides bake stability and gelled, pumpable, reversible texture. • Provides fruit suspension. • Syneresis control. • Often used with starch.
Dairy	Short shelf life set and stirred yogurts, Yogurt fruit preparations	<ul style="list-style-type: none"> • Provides excellent short texture and structure. • Provides pumpability, suspension, viscosity.
Health and Nutrition	Supplements, Health food, Colostomy bags, Band aids, Diarrhea treatment	<ul style="list-style-type: none"> • Reduction of blood cholesterol level. • Lowering blood glucose level after carbohydrate-rich meals. • Binding of heavy metals and their radionuclides. • Weight reduction. • Normalization of digestive irritations. • Wound healing.