

NOVATION™ 9230

Description: Organic food starch refined from waxy maize

Appearance: Fine, cream / off-white coloured powder

Features	Benefits
Certified organic waxy maize	NOVATION 9230 is a certified organic food starch and can be incorporated in 100% certified organic food products*. *depends on other ingredients in the recipe
Consumer friendly simple "organic starch" labelling	Labelled simply as organic starch.
Classed as a food ingredient in the EU	
Bland flavour profile	NOVATION 9230 has a bland flavour profile which can enhance the flavour of existing products and/or reduce flavours used in application.
Excellent process tolerance	Temperature, shear and acid stable – ideal for manufacturers working with harsher process conditions such as elevated temperatures, rotary retorting.
Texture similar to modified starch	Short, smooth textures perfect for soups and sauces Good dispersion characteristics means that
Insoluble in cold water and homogenous particle size distribution	Good dispersion characteristics mean that NOVATION 9230 is easy to use in most industrial scale processes.

APPLICATION AND USAGE INFORMATION

Application Summary:

NOVATION 9230 is an organic food starch designed as a thickener and stabilising agent for water based food systems that undergo heat and shear during food processing. This would include high temperature processing through scraped surface and plate heat exchangers, direct steam injection and vacuum cooling.

Typical applications include:

Ready to eat meals and meal solutions: For chilled and ambient gravies, soups and sauces where a “100% organic label” is a must this product excels. Delivering texture similar to a modified starch but with the added bonus of a simple label declaration. Bland flavour profile allows the richness and diversity of flavourings used in this area to be delivered cleanly to the consumer.

Organic canned soups and sauces: The slow viscosity development attributed to NOVATION 9230 makes it an ideal thickener in retorted soup and sauce applications. Its resistance to high acid and shear means that it provides excellent stability in low pH, emulsified products.

Organic baby food: NOVATION 9230 is an excellent viscosifier and texturizer in wet jar baby food.

Organic salad dressings: The high process tolerance of NOVATION 9230 makes it ideal for high shear, low pH emulsified products. NOVATION 9230 imparts good textural stability, even after high shear impact. Dressings produced with NOVATION 9230 will exhibit a smooth, short, stable texture.

Effective Date: 01.10.2012 [1]

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Usage Information:

NOVATION 9230 is a cook-up starch with a gelatinisation temperature of approximately 70 °C. Brabender viscosities mentioned below show that at 5% concentration and under low shear conditions, NOVATION 9230 begins to swell at 68 to 72 °C but maximum viscosity is only achieved at 90 to 130 °C in acid conditions (pH=3). The viscosity of NOVATION 9230 is very stable at high temperatures, low pH and high shear/stress conditions. Typical usage would involve addition to the aqueous phase in a stirred vessel and heated to 90 to 130 °C through a heat exchanger with a hold time of 3 to 5 minutes. Typical usage levels in liquid systems would be 2 to 5%.

Please note: Evaluation of NOVATION 9230 is recommended in each specific application since factors such as heating rate, solids content, shear/stress conditions, pH and the presence of other ingredients such as sugar and fats will affect gelatinisation behaviour and hence rheological and textural properties.

Label declaration recommendation: Organic Maize Starch:

The product is produced in compliance with Council Regulation (EC) No. 834/2007 on organic production and labelling of organic products and repealing (EEC) No. 2092/91, from organic waxy maize and permitted acidity regulators: sodium carbonate and citric acid.

EU Classification: Food Ingredient

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