



NOVATION® 3300 34131300

NOVATION® 3300 functional native starch is a tapioca based starch that is recommended for high temperature and shear food processing. It is ideally suited for use in dairy applications. Functional native starches are made with a revolutionary technology that gives properties similar to modified starches while meeting a clean labeling criterion. This product is produced under Ingredion Incorporated's TRUETRACE® Identify Preserved Program for non-GM products.

Chemical and Physical Properties

	Min.	Max.
Moisture, %	-	15.0
pH (20% w/w slurry)	5.0	6.5
Viscosity (CML-M107P2) End, MVU	400	900

Physical Appearance

	Typical
Color	Off-White to Cream
Form	Fine Powder

Screen Test

	Typical
% thru U.S.S. #100	>95
% thru U.S.S. #200	>85

Microbiological Limits

Initial testing is done on a single composite sample against a limit of m. If result is above m, the three class sampling and acceptance below is used.

	n	c	m	M
Total Plate Count/g	5	3	3,500	10,000
Yeast/g	5	3	200	1,000
Mold/g	5	3	200	1,000
Enterobacteriaceae	5	3	10	100

Where n = # of samples tested; c = maximum allowable number of results between m and M; m = upper target limit; M = maximum acceptable value.

<i>E. coli</i>	Negative
<i>Salmonella</i>	Negative

Nutritional Data/100 g

	Typical
Calories	359
Calories from fat	0
Total Fat, g	<0.1*
Cholesterol, mg	0
Sodium, mg	34
Total Carbohydrate, g	89.7
Dietary Fiber, g	0
Total Sugars, g	0
Added Sugars, g	0
Other Carbohydrate, g	89.7
Protein, g	<0.1*
Vitamin D, mcg	0
Calcium mg	41
Iron, mg	0.2
Potassium, mg	<20*
Ash, g	<0.1*

* Not present at level of quantification.

Certification

Kosher pareve
Halal

Packaging and Storage

NOVATION® 3300 functional native starch is packaged in multi ply Kraft paper bags with a net weight of 55 lbs. NOVATION® 3300 functional native starch should be stored in a clean, dry area at ambient temperature and away from heavily aromatic material.

Shelf Life

The best before date for NOVATION® 3300 functional native starch is 24 months from the date of manufacture.

Regulatory Data

Source	Tapioca
CAS No.	9005-25-8

United States

Meets FCC (Food Chemical Codex) requirements.
Labeling Tapioca Starch

Canada

CFDA Regulation	Unstandardized Food
Labeling	Tapioca Starch

Features and Benefits

NOVATION® 3300 functional native starch has excellent process tolerance. It performs in food processes where traditional native starches cannot be used as a viscosities or stabilizers. As a tapioca-based product, NOVATION® 3300 functional native starch features a lower hot viscosity which can be an advantage when using processing equipment such as plate heat exchangers. NOVATION® 3300 functional native starch is compatible in the same food processes where modified starches are currently used. No special preparation or equipment is needed to use this starch. When NOVATION® 3300 functional native starch is cooked, it imparts a smooth short texture and sets to a tender gel upon cooling. Because the textural properties closely resemble modified starches, only minor adjustments in formulation are necessary to replace modified tapioca starches in most food systems.

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Effective Date: September 14, 2020

Next Review Date: September 14, 2023

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