



NATIONAL FRIGEX® HV

06821300

NATIONAL FRIGEX® HV modified starch is derived from tapioca. This starch is extremely stable under low temperature storage conditions. This product is produced under Ingredion Incorporated's TRUETRACE® Identity Preserved Program for non-GM products.

Chemical and Physical Properties

	Min.	Max.
Moisture, %	-	15.0
pH (20% w/w slurry)	4.8	7.2
Viscosity (CML-M106) End, MVU	650	1150

Physical Appearance

	Typical
Color	White to Off-White
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	10,000	100,000
Yeast/g	5	3	200	1,000
Mold/g	5	3	200	1,000
Enterobacteriaceae	5	3	100	1,000

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	352
Calories from fat	1
Total Fat, g	<0.1*
Cholesterol, mg	0
Sodium, mg	39
Total Carbohydrate, g	87.9
Dietary Fiber, g	<0.1*
Total Sugars, g	<0.1*
Added Sugars, g	0
Other Carbohydrate, g	87.9
Protein, g	0.1
Vitamin D, mcg	0
Calcium mg	19
Iron, mg	0.4
Potassium, mg	<10*
Ash, g	<0.1*

* Not present at level of quantification.

Certification

Kosher pareve
Halal

Packaging and Storage

NATIONAL FRIGEX® HV modified starch is packaged in multi ply kraft paper bags with net weight of 50 lbs. NATIONAL FRIGEX® HV modified 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 NATIONAL FRIGEX® HV modified starch is 24 months from the date of manufacture.

Regulatory Data

Source Tapioca

United States

Meets FCC (Food Chemical Codex) requirements.
Labeling Food Starch-Modified

Canada

CFDA Regulation B.16.100, Table XIII
Labeling Modified Tapioca Starch

Features and Benefits

Cooked preparations of NATIONAL FRIGEX® HV modified starch are smooth, short-textured, and heavy-bodied. It develops viscosity at a relatively low temperature and can be thoroughly cooked by heating to 180°F (82°C) and holding for 10 minutes.

It is ideally suited for use in indirect high temperature short time processes and in some ultra high temperature processed products. NATIONAL FRIGEX® HV modified starch is also well suited for application in products that are subjected to extended low temperature storage. This product is produced under Ingredion Incorporated's TRUETRACE® Identity Preserved Program for non-GM products.

Effective Date: May 3, 2023

Next Review Date: May 3, 2026

The information described above is offered solely for your consideration, investigation, and independent verification. It is up to you to decide whether and how to use this information. Ingredion Incorporated and the Ingredion group of companies make no warranty about the accuracy or completeness of the information contained above or the suitability of any of their products for your specific intended use. Furthermore, all express or implied warranties of noninfringement, merchantability, or fitness for a particular purpose are hereby disclaimed. Ingredion Incorporated and the Ingredion group of companies assume no responsibility for any liability or damages arising out of or relating to any of the foregoing.

5 Westbrook Corporate Ctr.
Westchester, Illinois 60154
U.S.A.
708.551.2600

1600 – 90 Burnhamthorpe Rd., West
Mississauga, Ontario L5B 0H9
Canada
905.281.7950

www.ingredion.us