

NATIONAL™ 77-1760

Description: Chemically modified food starch refined from waxy maize

Appearance: Fine white/creamy powder

Label declaration recommendation: Modified Starch
Please note the botanical origin of starch only needs to be declared if starch contains gluten.

EU Classification: Food Additive E1442 (Complies with Regulation (EC) 1333/2008) and Regulation (EU) 231/2012).

Storage and Handling: Store in a clean, dry, well-ventilated warehouse at ambient temperature and humidity, away from odorous materials.

Shelf Life: 24 months from date of manufacture if stored correctly. Best before dates printed on each bag.

Safety Data: While not regarded as "Hazardous", food starches are fine organic powders and, as such, they can give rise to a nuisance dust which has the potential to cause a dust explosion. See Safety Data Sheet. This product has been produced in accordance with all relevant EU legislation and in compliance with the required EU standards for food safety and hygiene.

SUPPLY SPECIFICATION (PHYSICAL & CHEMICAL DATA)

	Min	Max	Unit	Method
Moisture	-	12.0	%	max packed. CML116: 4 hrs, 130°C
pH	5.0	7.0	-	CML100A: 9% aqueous suspension
MVA Viscosity 15 min	320	500	MVU	CML-M504
MVA Viscosity End	300	500	MVU	CML-M504

SUPPLY SPECIFICATION (MICROBIOLOGICAL DATA)

International Commission for Microbiological Standards for Food (ICMSF) methodology

	m	M	n	c	Unit	Method
TVC	1000	10000	5	3	CFU/ g	TP4100/CML261
Yeast	50	200	5	3	CFU/ g	TP4112/CML268
Mould	50	200	5	3	CFU/ g	TP4112/CML268
E. coli	-	negative	5	0	CFU/ g	TP4122/CML263
Salmonella	-	negative	5	0	/ 25 g	TP4119/CML264

Thermophilic anaerobic and aerobic spores: conform to NFPA (National Food Processors Association, USA) tests NCA1 & NCA2 (National Canners Association, USA)

Notes: m = Good Manufacturing Practice (GMP) target value
 M = maximum permissible value
 n = number of samples to be taken and analysed
 c = compliance (i.e. maximum number of samples between m and M)

Effective Date 23.06.2022

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.

The INGREDION mark and logo are trademarks of the Ingredion group of companies. All rights reserved. All contents copyright © 2022.

TYPICAL DATA*

	Value	Unit	Method
Ash	0.5	%	CML I 13: 575+/-25°C
Nutritional Data			
Energy	1545 / 364	kJ / kcal pro 100 g	Regulation (EU) 1169/2011
Fat	0	g / 100 g	CCl4 extraction
of which saturates	0	g / 100 g	CCl4 extraction
Carbohydrates	90.8	g / 100 g	calculation
of which sugar	0	g / 100 g	calculation
Fibre	0	g / 100 g	According to Regulation (EC) 1169/2011
Protein	0.1	g / 100 g	Kjeldahl
Salt	0.38	g / 100 g	calculation
Minerals			
Calcium	5	mg / 100g	F.E.S/A.A.S
Magnesium	2	mg / 100g	F.E.S/A.A.S
Iron	0.1	mg / 100g	F.E.S/A.A.S
Potassium	0.1	mg / 100g	F.E.S/A.A.S
Heavy Metals			
Total Heavy Metals	10	mg/kg	survey
Arsenic	1	mg/kg	survey
Lead	1	mg/kg	survey
Cadmium	0.1	mg/kg	survey
Mercury	0.05	mg/kg	survey

* While this information is typical of the product it should not be considered a specification.

ADDITIONAL INFORMATION

Contaminants	Complies with Regulation (EC) 1881/2006, as amended
Pesticides	Complies with Regulation (EC) 396/2005, as amended
Kosher Certificate	Yes
Halal Certificate	Yes
Sulfur Dioxide (SO₂)	Typically < 10 ppm

Legal Use Restrictions: E1442 products are not authorised for use in Category 13.1.3 Processed cereal-based foods and baby foods for infants and young children (defined by Directive 2006/125/EC), as per PART E of Regulation (EC) No 1333/2008.

Effective Date 23.06.2022

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.

The INGREDION mark and logo are trademarks of the Ingredion group of companies. All rights reserved. All contents copyright © 2022.

This document is issued on behalf of the Ingredion EMEA Company which is supplying the product. The Ingredion EMEA Companies are part of the Ingredion group of companies. The respective details of each of the Ingredion EMEA Companies are as follows:

Ingredion UK Limited
 Ingredion House
 Manchester Green
 339 Styal Road
 Manchester M22 5LW
 England

P: +44 (0) 161 435 3200
 F: +44 (0) 161 435 3300

Registered in England
 No. 07315745

Rafhan Maize Products Company Ltd
 Rakh Canal East Road
 Faisalabad
 Pakistan

P: +92 (0) 41 854 0121
 F: +92 (0) 41 871 1016

Registration number
 79 of 1952-1953

Ingredion Germany GmbH
 Grüner Deich 110
 20097 Hamburg
 Germany

P: +49 (0) 40 23 91 50
 F: +49 (0) 40 23 91 51 70

Amtsgericht Hamburg
 HRB 105432

Ingredion South Africa (Pty) Ltd
 Infinity Office Park, Suite 6, Block C,
 2 Robin Close, Meyersdal, 1448,
 Gauteng
 RSA

P: +27 (0) 11 867 9260
 F: +27 (0) 11 867 9271

Registration number
 2010/013219/07

Effective Date 23.06.2022

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.

The INGREDION mark and logo are trademarks of the Ingredion group of companies. All rights reserved. All contents copyright © 2022.