

## NOVATION® INDULGE 3920

**Description:** Food starch derived from tapioca

**Appearance:** Fine white/creamy powder

**Label declaration recommendation:** Starch

Please note the botanical origin of starch only needs to be declared if starch contains gluten.

**EU Classification:** Food Ingredient

**Packaging:** 25 kg Multiply Paper Sack

Bag labelling includes batch code and unique bag number, label declaration and best before date.

**Delivery Format:** 24 bags per pallet, stretch wrapped with bottom sheet.

Pallet types include: Wood and plastic, both 1200 x 1000 mm and Euro 1200 x 800 mm

Unit pallet weight: 600 kg. Other pack sizes, big bags and bulk, may be available.

**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. 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. See Safety Data Sheet.

### SUPPLY SPECIFICATION (PHYSICAL & CHEMICAL DATA)

	Min	Max	Unit	Method
Moisture	-	14.0	%	max packed. CML116: 4 hrs, 130°C
pH	4.5	8.0	-	CML100A: 10% aqueous suspension
MVA Viscosity, 95°C	100	400	MVU	CML-M625
MVA Viscosity, 30°C	500	2300	MVU	CML-M625

### SUPPLY SPECIFICATION (MICROBIOLOGICAL DATA)

International Committee for Microbiological Standards for Food (ICMSF) methodology

	m	M	n	c	Unit	Method
TVC	1000	10000	5	3	per g	TP4100/CML261
Yeast	50	200	5	3	per g	TP4109/CML286Y
Mould	50	200	5	3	per g	TP4109/CML268M
E. coli	-	absent	5	0	per g	TP4122/CML263
Salmonella	-	absent	5	0	per 25g	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 12.08.2016 [1]

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 © 2015.

## TYPICAL DATA\*

	Value	Unit	Method
<b>ICMSF Microbiological Data</b>			
	<b>m</b>	<b>M</b>	<b>n c Unit Method</b>
Enterobacteriaceae	10	100	5 2 per g TP4103/CML263
Staph. aureus	20	100	5 2 per g TP4106/CML265
Bacillus cereus	20	100	5 2 per g TP4108/CML278
Clostridium perfringens	0	20	5 2 per g TP4105/CML279
Group D Streptococci	0	10	5 2 per g TP4107/CML280
Total mesophilic Anaerobes	0	20	5 2 per g TP4130A/CML274
Listeria Species	20	100	5 1 per 25g TP4142B/CML281
Listeria monocytogenes	-	absent	5 0 per 25g TP4121/CML281
<b>Nutritional Data</b>			
	<b>Value</b>	<b>Unit</b>	<b>Method</b>
Energy	1663 / 391	kJ / kcal pro 100 g	Regulation (EU) 1169/2011
Fat	max 0.15	g / 100 g dry basis	CCl4 extraction
of which saturates	max 0.1	g / 100 g dry basis	CCl4 extraction
Carbohydrates	min 97	g / 100 g dry basis	calculation
of which sugar	0	g / 100 g dry basis	calculation
of which starch	min 97	g / 100 g dry basis	own analysis
Fibre	0	g / 100g	According to Regulation (EC) 1169/2011
Protein	max 0.5	g / 100 g dry basis	Kjeldahl
Salt	<500	mg / 100g	-
<b>Minerals</b>			
	<b>Value</b>	<b>Unit</b>	<b>Method</b>
Calcium	5	mg / 100g dry basis	F.E.S/A.A.S
Magnesium	2	mg / 100g dry basis	F.E.S/A.A.S
Iron	0.1	mg / 100g dry basis is	F.E.S/A.A.S
Potassium	<0.1	mg / 100g dry basis	F.E.S/A.A.S
<b>Heavy Metals</b>			
	<b>Value</b>	<b>Unit</b>	<b>Method</b>
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.

Effective Date 12.08.2016 [1]

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 © 2015.

## ADDITIONAL INFORMATION

<b>Contaminants</b>	Complies with Regulation (EC) 1881/2006, as amended
<b>Pesticides</b>	Complies with Regulation (EC) 396/2005, as amended
<b>Kosher Certificate</b>	yes
<b>Halal Certificate</b>	yes
<b>Preservative</b>	none used
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	typically < 10 ppm

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

**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 12.08.2016 [1]

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 © 2015.