

N-DULGE® 316

Description: Food starch and chemically modified starch refined from tapioca

Appearance: Fine white/creamy powder

Label declaration recommendation: Starch, Modified Starch

EU Classification: Food Ingredient and E1440

Packaging: 25 kg Multiply Paper Sack

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

Delivery Format: 20 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: 500 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, local and national legislation and in compliance with the required standards for food safety and hygiene. See Safety Data Sheet.

SUPPLY SPECIFICATION (PHYSICAL & CHEMICAL DATA)

	Min	Max	Unit	Method
Moisture	-	15.0	%	max packed. CML116: 4 hrs, 130°C
pH	4.5	8.0	-	CML100A02: 2% aqueous suspension

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: 1/6/2016 [1]

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TYPICAL DATA*

	Value	Unit	Method
ICMSF Microbiological Data			
	m	M	n c Unit Method
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
Nutritional Data			
	Value	Unit	Method
Energy	1663 / 391	kJ / kcal pro 100 g	Regulation (EU) 1169/2011
Protein	max 0.5	g / 100 g dry basis	Kjeldahl
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
Fat	max 0.15	g / 100 g dry basis	CCl4 extraction
of which saturates	max 0.1	g / 100 g dry basis	CCl4 extraction
Fibre	0	g / 100g	literature
Salt	<500	mg / 100g	-
Minerals			
	Value	Unit	Method
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
Heavy Metals			
	Value	Unit	Method
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.

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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
Preservative	none used
Sulfur Dioxide (SO₂)	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:

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Effective Date: 1/6/2016 [1]

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