Arla Foods Ingredients
Discovering the wonders of whey

Lactose

GDT auction

PRODUCT DESCRIPTION:

Lactose is a carbohydrate derived from milk suitable for standard food applications. It fulfills international quality standards such as CODEX for lactose, ensuring food safety at all times.

PRODUCT APPLICATION:

- Milk formula
- Beverages
- Confectionery
- Culinary
- Fine bakery

PROPERTIES:

- Meets CODEX requirements for lactose
- High purity and uniform chemical composition
- Fine and homogeneous particle size distribution
- Non hygroscopic and free flowing powder properties – small breakable soft lumps may occur
- The product is available in Kosher, Halal, and vegetarian

CHEMICAL SPECIFICATIONS	Unit	Specification		Frequency of analysis	Analytical method
		Min.	*Max.*		
Protein as is (Nx6.38)	%		0.2	Per batch	ISO 8968-3:2004(E)/IDF 20-3:2004
Lactose monohydrate as is	%	99.0		Per batch	Polarimetric method
Sulphated ash	%		0.3	Per batch	European Pharmacopeia method 7.2 (Method 2.4.14 Sulphated ash)
Moisture at 87°C	%		0.2	Per batch	Free water method
Total water	%		5.2	Monitoring	Karl Fisher method
Riboflavin	mg/100g		0.5	Per batch	HPLC, En 14152

PHYSICAL SPECIFICATIONS	Unit	Specification		Frequency of analysis	Analytical method
		Min.	*Max.*		
pH (10% sol.)		5.0	7.0	Per batch	155/ISO5546 2nd ed. 2010-06-01
Scorched particles		Equal to A		Per batch	ADPI 916:2002 50g dry powder
Bulk density				Monitoring	IDF 134:2005 / ISO 8967:2005, 625 stamp
- 100 mesh	g/cm3	0.8	1.0		
- 200 mesh	g/cm3	0.7	0.9		
Solubility index (10% sol.)		Clear		Per batch	Method to be defined
Colour		White/Cream		Per batch	Comparison to reference sample
Flavour/odour		Free from foreign odours and flavours		Per batch	Comparison to reference sample
Taste		Free from foreign taste		Per batch	Comparison to reference sample
Appearance		Free flowing powder		Per batch	Comparison to reference sample

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PARTICLE DISTRIBUTION	Specification		Frequency of analysis	Analytical method
	Min.	*Max.*		
100 mesh	>150 µm	5%	Monitoring	Sieve analysis
200 mesh	>75 µm	5%	Monitoring	Sieve analysis

MICROBIOLOGICAL SAMPLING AND LIMITS	Unit	Specification				Frequency of analysis	Analytical method
		m	*M*	*n*	*c*		
Total plate count (30°C aerobic)	CFU/g	2.500		5		Per batch	ISO 4833-1:2013(E)
Enterobacteriaceae	CFU/g	10		5		Per batch	ISO 21528-2:2004€
Enterococci	CFU/g	100		5		Per batch	NMKL No. 68:5th Ed. 2011
Yeast & mould	CFU/g	100		5		Per batch	ISO 6611:2004
Sulph. Red. Clostridia	CFU/g	30		5		Per batch	Anaerobic sulphite-reducing bacteria
Bacillus cereus	CFU/g	100		5		Per batch	ISO 7932:2004
	Sample size	*n*	**Absent in**				
Escherichia coli	1 g	1	1 g			Per batch	ISO 16649-3:2015
Listeria monocytogenes	25 g	1	25 g			Monitoring	ISO 11290-1:1998
Salmonella	125 g	1	125 g			Per batch	ISO 6579:2002
Coagulase positive staphylococci	1 g	5	5 g			Per batch	ISO 6888-3:2003

NUTRITIONAL VALUES

VALUES PER 100 G PRODUCT		
Energy	1.700/400	kJ/kcal

ALLERGENS

YES	NO	ALLERGENS	DESCRIPTION OF COMPONENTS
	•	Cereals containing gluten and products thereof	
	•	Crustaceans and products thereof	
	•	Eggs and products thereof	
	•	Fish and products thereof	
	•	Peanuts and products thereof	
	•	Soya beans products thereof	
•		Milk and products thereof (including lactose)	Bovine milk
	•	Nuts	
	•	(Tree) Nuts and products thereof	
	•	Celery and products thereof	
	•	Mustard and products thereof	
	•	Sesame seeds and products thereof	
	•	Sulphur dioxide and sulphites (>10 mg/kg)	
	•	Lupin and products thereof	
	•	Molluscs and products thereof	

STORAGE:

Store in closed bags in a cool and dry environment below 25°C and below 65% relative humidity.

SHELF LIFE:

24 months if kept under the prescribed storage conditions.

PACKAGING:

Small bags
- 25 kg easy-open strippable bag allowing easy separation of the inner liner
- Multilayer bag with integrated, heat-sealed PE liner for maximum product protection

Big bags
- Up to 1000 kg big bag, with integrated PE liner
- Permanently antistatic to eliminate the risk of dust explosions

LEGAL REFERENCES:

The product is manufactured, packaged and labelled according to the relevant EU-regulations for food and food ingredients, and/or FAO/ WHO Codex Alimentarius where applicable. This includes that the milk/milk constituents used as raw material originate from healthy cows. The milk used in the production is included in monitoring programmes for undesirable substances as required by regulations or HACCP-based risk assessment. The production plant is approved by the competent authorities and included in the EU register of approved food establishments.

Products manufactured outside EU complies with relevant regulations in the country where the product is produced.

GMO POLICY:

Arla Foods Ingredients Group P/S's objective is to avoid genetically modified ingredients in our products. The requirements we have established for our suppliers ensure that only non-GMO raw materials are used during production of our products. Therefore, our products and the raw materials used do not contain, consist of or are produced from GMOs as defined in regulation (EC) No 1829/2003 and they do not contain ingredients produced from GMOs. Therefore, our products do not need labelling according to Regulation (EC) No 1829/2003 and 1830/2003.

For the definition of GMOs we refer to EU Directive 2001/18/EC.

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