# Arla® Whole Milk Powder 26%

## Description

*Arla Whole Milk Powder 26%* is a spray-dried powder with approx. 26 % milk fat. It is based on fresh cow's milk, which has undergone legal pasteurisation, as well as further heat treatment and evaporation, prior to spray drying.

## Properties

*Arla Whole Milk Powder 26%* is a free-flowing powder, free of lumps, with a milky smell. WPNI: >1.5 <6.0 mg/g = medium heat (MH).

## Application

1. Recombining
2. Industrial production

Dosage depends on application. For recombining we recommend 100 g powder for 900 ml water giving approx. 1 litre 'whole milk'.

If for drinking purpose previously boiled lukewarm water must be used. Whole milk powder is not adapted to be used as infant feeding.

## Composition

**Whole milk.**

## Chemical Specifications - levels

| | | |
|---|---|---|
| Protein (Nx6.38 ) as is | | 24 % |
| Protein (Nx6.38) d.m. | | 34 % |
| Lactose | By difference/calculated | 41 % |
| Fat | | 26 % |
| Ash | | 6 % |
| Moisture | | 3.2 % |
| Titratable acidity as lactic acid* | | max 0.15 % |

*0.15%=17°T= 18 ml 0.1N NaOH

## Physical specifications

| | | |
|---|---|---|
| Form | | powder |
| pH (10% solution) | | 6.5-6.8 |
| Scorched particles | | Disc A |
| Bulk density | (x 625) | 0.54-0.75 g/cm³ |
| Bulk Volume | (x 625) | 135-185 cm³/100g |
| (In) Solubility index | | 0.5 ml |
| Colour | | slightly yellow |
| Flavour/odour | | distinctively creamy |

## Microbiological specifications

| | | |
|---|---|---|
| Total plate count | CFU/g | max 10000 |
| Bacillus cereus | CFU/g | max 100 |
| Sulphite red. Clostr. spores* | CFU/g | max 50 |
| Enterobacteriaceae | CFU/g | <10 |
| Coag. Pos. Staphylococci (S. aureus) | CFU/g | <10 |
| Yeast/Mould | CFU/g | max 50 |
| Salmonella | 125 g | Absent |
| Listeria ** | 25 g | Absent |

Coliforms, E. Coli and Cronobacter spp. are controlled via Enterobacteriaceae - listed above.

*Anaerobic sulphite-reducing Bacteria (spores).

**Absent stated due to: Listeria cannot survive the process and has no possibility for growth in powder. Listeria is controlled by monitoring.

## Certificate of Analysis (CoA) and Release Procedure

Certificate of Analysis (CoA) with selected parameters from above 'Chemical, Physical and Microbiological Specifications' are available after 'positive release' at packed batch level.

Methods in use are with reference to international recognised standards (e.g. ISO, IDF) if applicable. Testing is mainly performed at own lab, which participates in relevant proficiency schemes. Pathogen testing is performed by accredited labs/methods.

Representative samples are collected from each production batch.

Testing is performed on selected parameters as a combination of individual final batch testing and monitoring of the whole production process.

Retain samples representing all delivered batches are kept during prescribed shelf life.

## Origin, Health Mark/Identification Mark (Id. mrk)

This product is produced of milk from the EU at:

| | |
|---|---|
| Arla Foods Arinco Id. mrk: | DK-M165-EC |
| Arla Foods Akafa Id. mrk: | DK-M187-EC |
| Arla Foods Pronsfeld Id. mrk: | DE-RP 247-EC |
| Arl Foods Upahl Id. mrk | DE-MV006-EG |
| Arla Foods Vimmerby Id. mrk: | SE-1022-EC |
| Arla Foods Visby Id. mrk: | SE-1035-EC |

The production country and site is identified on the packaging through the identification marks listed.

**Arla Foods amba**

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## Packaging
Multi-layer paper bag with a PE inner liner; 25 kg net or big bags, 1000 kg net (standard).

On new wooden heat treated pallets with cover - full wrapped or with a plastic hood.

Bags can be loaded loose in container (per customer agreement).

## Storage
Products are to be stored in closed bags away from strong odours under cool, dry conditions to prevent deterioration due to humidity and high temperatures.

## Shelf Life
12 months minimum if kept under the prescribed storage conditions.

## Preservation
*Arla Whole Milk Powder 26%* has not been irradiated. Preservatives e.g. benzoate, sorbate have not been added.

## Remarks
For products with Kosher and/or Halal certificate please request for availability. For product packed under protective atmosphere please ask for availability.

## REACH/CLP/MSDS
Registration, Evaluation, Authorisation of Chemicals (REACH) Regulation (EC) No. 1907/2006: As food/feed as well as for other purposes milk powders are exempted from REACH (ref. to art. 2(3) and Annex V (8)). Classification, labelling and packaging (CLP) Regulation (EC) No. 1272/2008: Milk powders are not hazardous substances/ mixtures and not classified as dangerous (Dir. 67/548/EEC) – no need for labelling in this respect.

Safety Data Sheet (MSDS) available upon request.

## Various Contaminants - Monitoring
Antibiotic - below legal maximum residue levels (MRL) – tested on raw milk at silo tank level prior to release for production, by use of quick test.

Aflatoxin M1 – verified through random testing of raw milk samples - results well below 0.05 mcg/l milk.

Pesticides - yearly monitoring through representative samples of raw milk. - all below legal maximum residue levels (MRL).

Through monitoring of milk and/or products the below can be confirmed to be in control for the powder:

Dioxins: max 2.5 pg WHO-PCDD/F-TEQ/g milk fat
Dioxins+DL-PCBs: max 5.5 pg WHO-PCDD/F-PCB-TEQ/g milk fat
NDL-PCBs: max 40 ng/g milk fat

| | |
|---|---|
| Lead (Pb) mg/kg | < 0.02 |
| Arsenic (As) mg/kg | < 0.1 |
| Mercury (Hg) mg/kg | < 0.01 |
| Cadmium (Cd) mg/kg | < 0.005 |
| Tin (Sn) mg/kg | < 0.05 |
| Nitrate (NO3) mg/kg | max 50 |
| Nitrite (NO2) mg/kg | max 5 |

Melamine due to adulteration is absent – verified through monitoring of products to be well below 0.5 mg/kg.
Our authorities are over viewing radioactive out-falls and monitor the residue level in food, water and environment. For milk the level of Cs134+Cs 137 are tested to be well below 10 Bq/kg.

**Nutritional data** (avg. values for nutrition labelling per 100g based on best available data including data from literature)

| | |
|---|---|
| Energy (calculated) | 2070 kJ/495kcal |
| Fat | 26 g |
| of which saturated fatty acid | 17 g |
| Trans fatty acid | 0.9 g |
| Carbohydrate | 41 g |
| of which sugars (lactose) | 41 g |
| Protein (Nx6.38) | 24 g |
| Dietary Fibre | 0 g |
| Salt (NaCl) | 0.75 g |

**Selected elements**

| | |
|---|---|
| Vitamin A | 780IU/234 RE |
| Vitamin $B_2$ | 1.1 mg |
| Calcium | 880 mg |
| Potassium | 1200 mg |
| Phosphate | 710 mg |

## Legal references
*Arla Whole Milk Powder 26%* is in legal terms a food ingredient fit for human consumption or for production of food for human consumption meeting standards laid down by the EU and/or FAO/WHO Codex Alimentarius, as applicable. It is labelled according to relevant EU legislation.
National legislation should always be consulted for application and labelling.
The product is produced at factory units authorized by and under supervision of national authorities for production of food of animal origin (milk based). Assigned authorization number is printed on the packaging.
The factory units have established HACCP plans for the production based on FSSC 22000, IFS or BRC requirements.

The product is produced from pasteurized milk/milk constituents from healthy cows. Monitoring programs for undesirable matters are established for the milk and/or the product according to legislation and HACCP based risk assessment.
Products produced at facilities within the EU are based on milk/milk constituents fulfilling EU standards, demands and legislation.

Packaging materials comply with demands laid down for materials and articles intended to come into contact with food (in dry powder form).

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## GMO policy

*Arla Whole Milk Powder 26%* is considered as a non-GMO product according to the definition for GMO stated in EU Directive No 2001/18, art. 2 and thus requires no GMO-labelling, in accordance with EU Regulation (EC) No 1829/2003 and EU Regulation (EC) No 1830/2003.

Our objective is to avoid genetically modified ingredients in our products.

No GM-techniques are used for the production.

When purchasing raw materials we look for non-GMO raw materials subject to the EU definition above, based on the GMO information we receive from our suppliers.

## Allergens

The table below indicates the presence (as added component) of the following allergens and products thereof – based on Annex II in Regulation 1169/2011 as amended.

| 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 | |

## Analytical Methods, Chemical and Physical

Methods in use in our laboratories are with reference to the below listed standards methods, as applicable.

| | |
|---|---|
| Protein (Nx6.38) | ISO 8968-3 |
| | IDF 20-3 |
| Fat | ISO 1736 |
| | IDF 9 |
| Moisture | NMKL 110 2. Ed. |
| Minerals (Ash) | NMKL 173: |
| Titratable acidity | ADPI 916 |
| | ISO 6091 |
| pH (10 % solution) | Potentiometric method |
| Bulk density/Bulk Volume | IFS 134 |
| | ISO 8967 |
| Scorched particles | ADPI 916 |
| (In) Solubility Index | IDF 129 |
| | ISO 8156 |

## Analytical Methods, Microbiological

Methods in use in our laboratories are with reference to the below listed standards methods, as applicable.

| | |
|---|---|
| Total Plate Count | ISO 4833: |
| Bacillus Cereus | ISO 7932 |
| Anaerobic sulphite-reducing Bacteria spores (clostridia) | NMKL No 56, 4. Ed |
| Enterobacteriaceae | ISO 21528-2 |
| Coagulase-pos. Staphylococcus (aureus) | ISO 6888-1 |
| Yeast and Mould | ISO 6611 |
| | IDF 94 |
| Salmonella | BAX® System Q7 * |
| | ISO 6579 |

*BAX® System Q7 approved for salmonella testing by AOACRI, AFNOR, Nordval, USDA Food Safety Inspection Service and validated by Danish authorities against ISO 6579:2002

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