

## ULTRA-SPERSE® IMF

**Description:** Pregelatinized food starch refined from waxy maize and specifically designed for infant milk formulae

**Appearance:** Coarse white/creamy powder

**Label declaration recommendation:** Starch

**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:** 15 bags per pallet, stretch wrapped with bottom sheet.

Pallet types include: Wood 1200 x 1000 mm

Unit pallet weight: 375 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                         | -    | 10.0 | %    | max packed. CML116: 4 hrs, 130°C |
| pH                               | 4.5  | 7.0  | -    | CML100A09: 9% aqueous suspension |
| MVA Viscosity Peak               | 1100 | 1850 | MVU  | CML-M404H                        |
| MVA Viscosity Peak – 15 min Drop | 90   | 670  | MVU  | CML-M404H                        |
| Bulk Density                     | 0.2  | 0.3  | g/cc | CML158B                          |
| Particle size on 14 mesh         | -    | 1.0  | %    | CML105B                          |
| Particle size thru 20 mesh       | 82.0 | -    | %    | CML105B                          |
| Particle size thru 100 mesh      | -    | 50.0 | %    | CML105B                          |

### SUPPLY SPECIFICATION (MICROBIOLOGICAL DATA)

International Committee for Microbiological Standards for Food (ICMSF) methodology

|                         | m | M        | n  | c | Unit      | Method        |
|-------------------------|---|----------|----|---|-----------|---------------|
| TVC                     | - | 1000     | 5  | 0 | per g     | TP4100/CML261 |
| Yeast and Mould         | - | 100      | 5  | 0 | per g     | TP4108/CML268 |
| E. coli                 | - | Negative | 5  | 0 | per 30 g  | TP4122/CML263 |
| Salmonella              | - | Negative | 30 | 0 | per 25g   | TP4119/CML264 |
| Bacillus cereus         | - | 10       | 5  | 0 | per g     | TP4108/CML278 |
| Coliforms               | - | <0.3     | 5  | 0 | MPN per g | CML276        |
| Clostridium perfringens | - | 10       | 5  | 0 | per g     | TP4105/CML279 |
| Enterobacteriaceae      | - | Negative | 10 | 0 | per 30g   | TP4103/CML263 |

Effective Date 13.06.2016 [1]

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|                        |   |          |    |   |         |                     |
|------------------------|---|----------|----|---|---------|---------------------|
| Enterobacter sakazakii | - | Negative | 30 | 0 | per 10g | CML285 /ISO/TS 2964 |
| Listeria monocytogenes | - | Negative | 10 | 0 | per 25g | TP4121/CML281       |
| Staph. aureus          | - | Negative | 5  | 0 | per g   | TP4106/CML265       |

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)

### TYPICAL DATA\*

|                         | Value      | Unit                   | Method                    |
|-------------------------|------------|------------------------|---------------------------|
| Ash                     | 0.5        | %                      | CML113: 575+/-25°C        |
| <b>Nutritional Data</b> |            |                        |                           |
| 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    | CCI4 extraction           |
| of which saturates      | max 0.1    | g / 100 g dry basis    | CCI4 extraction           |
| Fibre                   | 0          | g / 100g               | literature                |
| Salt                    | <200       | mg / 100g              | -                         |
| <b>Minerals</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>     |            |                        |                           |
| 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

|  |   |
|--|---|
| <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                                  |

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