

| ISOLAC INSTANT | | TECHNIC | AL SPECIFICATION |
|--------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------|---------------------|
| Product Description | | hey protein isolate produced by micro-filtrat le for applications which require rapid disper | |
| Ingredient Listing | Whey Protein Isolate, (Milk), | Emulsifier (Soy Lecithin). | |
| Customer | Deimos SRL | | |
| Chemical | Specification | Typical | Test Method |
| Protein (N*6.38) (% dry basis) | 92.0 Min | 92.0 | Kjeldahl |
| Total Nitrogen (TN) (%) | 13.7 Min | 13.7 | Kjeldahl |
| Moisture (%) | 6.00 Max | 5.00 | Oven |
| Fat (%) | 1.00 Max | <1.00 | NIR |
| Ash (%) | 4.00 Max | 3.50 | Furnace 550°C |
| Lactose (%) | 1.0 Max | 0.8 | Calculated |
| рН | 6.00 Min | 6.30 | 10% Aq Soln |
| Microbiological | | | |
| Standard Plate Count (SPC) | <5,000 / g | <1,000 / g | ISO 4833:2003 |
| Coliforms | <10 / g | <10 / g | ISO 4832:2006 |
| E.coli | <10 / g | <10 / g | ISO 16649-2:2001 |
| Staph. aureus | <10 / g | <10 / g | ISO 6888:2003 |
| Salmonella | Not Detected / 25g | Not Detected / 25g | ISO 6579:2002 |
| Yeast & Moulds | <50/g | <10/g | ISO 6611:2004 |
| Physical | | | |
| Scorched particles | Disc B or better | Disc A | ADPI Bulletin 916 |
| Bulk Density | 0.40 ± 0.10 g/cc | 0.40 g/cc | IDF134:1996 |
| Appearance | | Homogenous, free-flowing powder | Visual |
| Colour | | Creamy white | Visual |
| Organoleptic | | Typical, free from off-flavour | Taste |
| Mineral Profile | | | |
| Calcium (mg/100g) | | 500 | Atomic Spectroscopy |
| Sodium (mg/100g) | | 150 | Atomic Spectroscopy |
| Potassium (mg/100g) | | 300 | Atomic Spectroscopy |
| Magnesium (mg/100g) | | 60 | Atomic Spectroscopy |
| Phosphorous (mg/100g) | | 250 | Atomic Spectroscopy |
| Chloride (mg/100g) | | <50 | Titration |

Prepared by SM 8.15.2.3.9 Page 1 of 2 Rev. 9 25.11.14

Typical Nutritional Information

Fibre

| Amino Acid Profile | (g per 100g Powder) | (g per 100g Protein) |
|----------------------------------|---------------------|----------------------|
| Leucine | 9.87 | 11.17 |
| Isoleucine | 7.26 | 8.21 |
| Valine | 6.62 | 7.49 |
| Total Branched Chain Amino Acids | 23.75 | 26.87 |
| Aspartic Acid | 10.6 | 11.99 |
| Glutamic Acid | 18.1 | 20.48 |
| Serine | 4.96 | 5.61 |
| Glycine | 1.51 | 1.71 |
| Histidine | 1.54 | 1.74 |
| Arginine | 1.89 | 2.14 |
| Threonine | 7.07 | 8.00 |
| Alanine | 5.25 | 5.94 |
| Proline | 6.04 | 6.83 |
| Tyrosine | 2.67 | 3.02 |
| Methionine | 2.15 | 2.43 |
| Cystine | 2.37 | 2.68 |
| Phenylalanine | 2.80 | 3.17 |
| Lysine | 9.75 | 11.03 |
| Tryptophan | 1.60 | 1.81 |
| Protein Utilisation* | | |
| PER | 3.5 | |
| BV | 104 | |
| PDCAAS | 0.98 | |
| * As per scientific literature | | |
| Digestibility % | 98 min | |
| Fatty Acid Profile | | |
| Saturates (%) | <1.0 | |
| Mono-unsaturates (%) | <1.0 | |
| Polyunsaturates (%) | <1.0 | |
| Cholesterol (mg/100g) | 7 | |
| Carbohydrates | | |
| Lactose (%) | 1.0 | |
| Glucose (%) | <0.1 | |
| Sucrose (%) | <0.1 | |
| Energy | 364Kcal / 1525 KJ | |
| Ethan | N I'I | |

Diet Suitability

This product is suitable for individuals with the following dietary requirements:
Kosher, Halal, Vegetarian, Ovo-Lacto Vegetarian, Coeliacs, Diabetics, GMO Free, Nut/Seed free.

Storage

Store under clean, cool, dry conditions not exposed to direct sunlight or strong odours and avoiding direct contact with walls and floors. Recommended shelf life is 36 months

Packaging

Packed in 20kg multiwall papersacks with polythene liners. Each sack will be heat sealed. The product will be palletised and shrink wrapped.

Labelling

The following will be printed in large blue writing on white sacks. "Isolac", Manufactured by Carbery Food Ingredients and processor EU number.

Coding

Each sack will be individually coded by an automatic ink jet system to ensure traceability

Allergen

Refer to bold print on Ingredient Listing.

Prepared by Approved by SM 8.15.2.3.9 Page 2 of 2 Rev. 9 25.11.14

Nil