

35 High Fat (HFR 35)
TECHNICAL SPECIFICATION

Product Description Carbelac 35 High Fat Whey Protein Concentrate (WPC) is a food grade powder containing high quality whey protein. It is manufactured from dairy whey using ultrafiltration and spray drying technology.

Ingredient Listing Whey Protein Concentrate (**Milk**)

Chemical	Specification	Typical	Test Method
Protein (N*6.38) (%)	34.0 Min	34.0	Kjeldahl
Total Nitrogen (TN) (%)	5.3 Min	5.3	Kjeldahl
Moisture (%)	6.0 Max	5.0	Oven
Fat (%)	16.0 Max	12.0	NIR
Ash (%)	7.0 Max	6.5	Furnace 550°C
Lactose (%)	56.0 Max	46.0	Calculated
pH	6.0 Min	6.3	10% Aq Soln

Microbiological

Standard Plate Count (SPC)	<50,000 / g	<10,000 / g	ISO 4833:2003
Enterobacteriaceae	<10 / g	<10 / g	ISO 21528:2004
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	0.65 ± 0.10 g/cc	0.65 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)	650	ICP (Ref: ISO13804:2013)
Sodium (mg/100g)	700	ICP (Ref: ISO13804:2013)
Potassium (mg/100g)	1,600	ICP (Ref: ISO13804:2013)
Magnesium (mg/100g)	110	ICP (Ref: ISO13804:2013)
Phosphorous (mg/100g)	550	ICP (Ref: ISO13804:2013)
Chloride (mg/100g)	1,300	Titration

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Typical Nutritional Information

Amino Acid Profile	(g per 100g Powder)	(g per 100g Protein)
Leucine	2.11	6.03
Isoleucine	0.97	2.77
Valine	1.96	5.60
<i>Total Branched Chain Amino Acids</i>	<i>5.04</i>	<i>14.40</i>
Aspartic Acid	4.12	11.77
Glutamic Acid	0.75	2.14
Serine	6.63	18.94
Glycine	1.03	2.94
Histidine	2.01	5.74
Arginine	1.16	3.31
Threonine	1.63	4.66
Alanine	2.12	6.06
Proline	0.61	1.74
Tyrosine	0.56	1.60
Methionine	0.79	2.26
Cystine	1.88	5.37
Phenylalanine	3.53	10.09
Lysine	3.62	10.34
Tryptophan	0.23	0.66

Protein Utilisation*

PER	3.5
BV	104
PDCAAS	0.96
Digestibility	98-100%

* As per scientific literature

Fatty Acid Profile

Saturates (%)	5.18
Mono-unsaturates (%)	2.45
Polyunsaturates (%)	0.37
Cholesterol (mg/100g)	160.0

Carbohydrates

Lactose (%)	46.0
Glucose (%)	<0.01
Sucrose (%)	<0.01

Energy	398 Kcal / 1665 KJ
Fibre	Nil

Diet Suitability

This product is suitable for individuals with the following dietary requirements: Kosher, Halal, Vegetarian, Ovo8j-Lacto Vegetarian, Coeliac, Diabetic, Nut/Seed free.

This product neither contains nor consists of genetically modified organisms (GMO's) nor is it produced from or contains ingredients produced from GMO's.

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 25kg 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. "Carbelac", 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 in Ingredient Listing