

# Product Information

**Product:** Whey protein isolate 92%

## Description & application

Volactive® UltraWhey 90 Instant is manufactured from whey using cross-flow membrane filtration. The resulting protein concentrate is spray-dried with concurrent agglomeration and instantised with sunflower lecithin (E322). This product provides an excellent source of natural protein for use in a variety of food and beverage applications.

<b>Chemical properties</b>	Typical	Min/Max	Reference method
Protein % (Nx6.38, dry matter)	92	90 min	NIR (cal. to Dumas)
Moisture %	5.0	6.0 max	NIR (cal. to moisture balance; 105°C)
Ash %	2.8	4.0 max	NIR (cal. to oven, 550°C)
Lactose %	2.3	3.5 max	HPLC
Fat %	0.6	1.0 max	NIR (cal. to Rose-Gottlieb)
pH	6.2	5.8 min	pH meter (10% solution)

<b>Physical properties</b>	Typical	Reference method
Appearance	White to off-white powder	Sensory assessment
Flavour & odour	Milky, clean, no off flavour	Sensory Assessment
Scorched particles	Disc A	ADPI, bulletin 916
Bulk density, g/mL	0.40	Tapped (50g; 200 taps)

<b>Microbiological properties</b>	Typical	Max	Reference method
Total Viable Count, cfu/g	<5,000	10,000	ISO 4833-1:2013
Enterobacteriaceae, cfu/g	<10	10	ISO 21528-2:2017
Yeasts, cfu/g	<10	10	ISO 6611:2004
Moulds, cfu/g	<10	10	ISO 6611:2004
Escherichia coli, cfu/g	<10	<10	ISO 16649-2:2001
Salmonella in 375g	Not detected	Not detected	ISO 6579-1:2017
Coagulase positive staphylococci, cfu/25g	Not detected	10	ISO 6888-1:2021

### Milk origin

Bovine milk from the UK and EU.

### Allergens

Milk and products thereof (lactose and protein).

### GMO

Non-GM product; does not contain, consist of, nor produced from genetically modified organisms (GMOs), in whole or in part.

### Informed Ingredient

Registered with Informed Ingredient and being screened for more than 250 banned and prohibited substances as specified on the World Anti-Doping Code International Standard.

### Intended use

Volactive® UltraWhey 90 Instant is intended for use in products for the general population, with exception of foods intended for infants and young children. It has not undergone a food safety risk assessment to determine its suitability for food intended for consumers with vulnerabilities or sensitivities.

### Diets

Vegetarian, Kosher and Halal.

### Nanomaterials

Product does not contain 'engineered nanomaterials'.

### Irradiation

Product and raw materials are produced without the application of any irradiation technology or Ethylene Oxide treatment.

### Shelf life & Storage

Twenty-four months from date of manufacture when stored in the original sealed packaging in a cool, dry place, away from strong odours, aromatic materials and direct sunlight.

### Packaging

Paper multi-wall heat-sealed bag with blue inner heat-sealed polyethylene liner containing 20 Kg net weight.

### Tariff code

3502 2091

### Nutritional information, g per 100 g powder

Energy value, KJ	1,555
Energy value, Kcal	366
Protein	92.0
Carbohydrates	2.30
of which sugars	2.30
Fat	0.60
unsaturated	0.45
monounsaturated	0.25
polyunsaturated	0.20
trans	0.01
saturated	0.15
Cholesterol	<0.01
Dietary fibre	0.00

### Protein declaration, %

The protein declaration of a product is strongly linked to the product application, the industry and/or the legal labelling requirements. The table below provides the different ways that the protein content of Volactive® UltraWhey 90 Instant can be declared.

	Typical	Min
Nx6.38; dry matter basis	92.0	90.0
Nx6.38; as is basis	87.9	86.0
Nx6.25; dry matter basis	90.1	88.2
Nx6.25; as is basis	86.0	84.2

### Minerals, mg per 100g powder

Calcium	450
Chloride	50.0
Iron	0.60
Magnesium	50.0
Phosphorus	220
Potassium	400
Sodium	200
Selenium	0.07
Zinc	0.30

### Vitamins, µg per 100g powder

B1 - Thiamin	120
B2 - Riboflavin	200
B3 - Niacin	50.0
B5 - Pantothenic acid	70.0
B6 - Pyridoxine	16.0
B9 - Folate	17.0
B12 - Cyanocobalamin	3.50
D3 - Cholecalciferol	1.00

**Amino acid profile, g per 100g powder**

Alanine	4.70
Arginine	1.50
Aspartic acid	10.5
Cystine	2.20
Glutamic Acid	16.2
Glycine	1.60
Histidine	1.40
Isoleucine	5.50
Leucine	8.80
Lysine	9.00
Methionine	2.00
Phenylalanine	2.50
Proline	5.70
Serine	5.00
Threonine	6.90
Tryptophan	1.60
Tyrosine	2.30
Valine	5.00

**Protein fractions, % of protein**

Beta-Lactoglobulin	50 - 60
Alpha-Lactalbumin	15 - 20
Glycomacropeptide	15 - 20
Bovine Serum Albumin	1.0 - 2.0
Immunoglobulin G	1.0 - 2.0
Immunoglobulin A	0.1 - 1.0
Lactoferrin	0.1 - 0.5

**Contaminants**

	MRL		MRL
Arsenic, ppm	1.00	Aflatoxin M1, ppb	0.05
Cadmium, ppm	0.10	Ochratoxin A, ppb	2.00
Chromium, ppm	0.10	Melamine, ppm	2.50
Lead, ppm	0.02	Chlorate, ppm	0.15
Mercury, ppm	0.05	Perchlorate, ppm	0.05
Manganese, ppm	1.00	BAC, ppm	0.10
Nitrate, ppm	100	DDAC, ppm	0.10
Nitrite, ppm	2.00	Pesticides	Legal UK & EU compliance
Sum of dioxins (WHO-PCDD/ F-TEQ), pg/f fat	2.00		
Sum of dioxins and dioxin-like PCBS (WHO-PCDD/F-PCB- TEQ), pg/f fat	4.00		
Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180 (ICES – 6), ng/g fat	40.0		

**Accreditations & Memberships**

FSSC 22000	ISO 9001	Kosher certified	SEDEX
ISO 45001	ISO 50001	Halal certified	Ecovadis
ISO 14001	SMETA certified	Informed Ingredient	EWPA

**Disclaimer**

The information presented in this document is from average values of continuous work and is believed to be accurate and reliable. The information should be used as guidance only, since certain product batches can deviate from the typical figures. This document is reviewed at least annually.