

Pea Protein Isolate

CAS No.	EINECS No.	UN No.	Molecular Formula / Product Type
/	/	/	Yellow pea protein preparation

Product Description

HYDROPEA® Pea Protein Isolate. Grades: C85A, C85B, C80A, C80B. Pea protein isolate is produced by separating and concentrating protein from yellow peas, followed by homogenization, sterilization and spray drying. The C series includes two 85% grades and two 80% grades. A grades emphasize water absorption and viscosity; B grades are processed to improve taste and solubility.

Specifications

Parameter	Specification
Appearance	Cream-colored powder
Protein, dry basis (%)	C85A: ≥85.0; C85B: ≥85.0; C80A: ≥80.0; C80B: ≥80.0
Moisture (%)	≤8.0
Ash (%)	≤6.5
Crude fiber (%)	C85A: ≤3.0; C85B: ≤3.0; C80A: ≤3.0; C80B: ≤7.0
pH	6.0–8.0
Total plate count (CFU/g)	<10,000
Yeast (CFU/g)	<50
Molds (CFU/g)	<50
Escherichia coli	Not detected
Salmonella	Not detected

Typical Properties / Use Guidance

Property / Guidance	Typical Value
Grade selection	C85A: Conventional isolate; ≥85% protein. High water absorption and viscosity for powders and food formulations.; C85B: Conventional isolate; ≥85% protein. Processed to improve taste and solubility for beverages and meat alternatives.; C80A: Conventional isolate; ≥80% protein. High water absorption and viscosity for powder blends and food formulations.; C80B: Conventional isolate; ≥80% protein. Improved taste and solubility; the fiber limit differs from the other C grades.
Typical data status	Nutritional and amino acid values below are per 100 g powder and are not guaranteed specification limits. Not detected does not mean a numerical zero.
Nutrition: Total fat (g)	C85A: 2.11; C85B: 2.05; C80A: 1.34; C80B: 6.90
Nutrition: Saturated fat (g)	C85A: 0.48; C85B: 0.42; C80A: 0.35; C80B: 1.61
Nutrition: Total carbohydrate (g)	C85A: 3.29; C85B: 3.31; C80A: 4.60; C80B: 3.70
Nutrition: Calories from fat (kcal)	C85A: 55; C85B: 54; C80A: 75; C80B: 62
Nutrition: Energy (kcal)	C85A: 388; C85B: 387; C80A: 397; C80B: 388
Nutrition: Total sugars (g)	Not detected
Nutrition: Iron (mg)	C85A: 18.75; C85B: 19.12; C80A: 22.41; C80B: 20.43
Nutrition: Potassium (mg)	C85A: 76.43; C85B: 77.24; C80A: 97.61; C80B: 91.61
Nutrition: Calcium (mg)	C85A: 192.62; C85B: 203.35; C80A: 166.64; C80B: 239.42
Nutrition: Sodium (mg)	C85A: 793.97; C85B: 788.41; C80A: 1109.38; C80B: 935.63
Amino acid (g/100 g): Isoleucine	C85A: 3.88; C85B: 3.96; C80A: 3.95; C80B: 3.85
Amino acid (g/100 g): Leucine	C85A: 7.48; C85B: 7.51; C80A: 6.91; C80B: 7.02
Amino acid (g/100 g): Lysine	C85A: 6.44; C85B: 6.32; C80A: 6.00; C80B: 6.17
Amino acid (g/100 g): Methionine	C85A: 1.09; C85B: 1.12; C80A: 0.87; C80B: 0.96
Amino acid (g/100 g): Phenylalanine	C85A: 4.90; C85B: 4.75; C80A: 4.49; C80B: 4.56
Amino acid (g/100 g): Threonine	C85A: 2.92; C85B: 2.83; C80A: 2.94; C80B: 2.95
Amino acid (g/100 g): Tryptophan	C85A: 0.72; C85B: 0.75; C80A: 0.66; C80B: 0.62
Amino acid (g/100 g): Valine	C85A: 4.47; C85B: 4.52; C80A: 4.12; C80B: 4.22
Amino acid (g/100 g): Arginine	C85A: 7.49; C85B: 7.56; C80A: 6.39; C80B: 7.07
Amino acid (g/100 g): Cystine	C85A: 1.50; C85B: 1.41; C80A: 1.51; C80B: 1.40
Amino acid (g/100 g): Glutamic acid	C85A: 14.85; C85B: 14.74; C80A: 14.12; C80B: 13.98
Amino acid (g/100 g): Histidine	C85A: 2.32; C85B: 2.22; C80A: 1.92; C80B: 2.01
Amino acid (g/100 g): Proline	C85A: 3.51; C85B: 3.63; C80A: 3.24; C80B: 3.29
Amino acid (g/100 g): Tyrosine	C85A: 3.23; C85B: 3.42; C80A: 3.11; C80B: 3.03
Amino acid (g/100 g): Alanine	C85A: 3.65; C85B: 3.60; C80A: 3.44; C80B: 3.42
Amino acid (g/100 g): Aspartic acid	C85A: 9.69; C85B: 9.72; C80A: 9.12; C80B: 9.20
Amino acid (g/100 g): Glycine	C85A: 3.31; C85B: 3.28; C80A: 3.12; C80B: 3.13
Amino acid (g/100 g): Serine	C85A: 4.25; C85B: 4.33; C80A: 4.17; C80B: 4.10

Applications

- Protein powders and bars — C85A and C80A offer water absorption and viscosity for nutrition powders and protein bars. Compare protein level, texture and processing behavior when selecting the conventional isolate grade.
- Beverages and dairy alternatives — C85B and C80B are intended for improved taste and solubility in beverages and non-dairy yogurt formulations. Sample trials should include your stabilizers, heat treatment and final recipe.
- Meat alternatives and savory foods — B grades can be evaluated in meat substitutes, while the C series is also identified for seasoning mixes and nut butters. Select the grade for its function in the finished food.

Packaging and Storage

Packaging	20 kg bag with PE liner
Storage	Keep sealed in a cool, dry place, protected from moisture and direct sunlight. Shelf life: 2 years in unopened original packaging.

Safety and Regulatory

Food-grade protein ingredient for the stated applications. Prevent dust formation and follow the applicable SDS for handling. Confirm suitability for the intended application and destination-market requirements.

Company Contact

Hainan Zhongxin Chemical Co., Ltd.

Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China.

Tel: +86-21-54265599 | sales@zxchem.com.cn | www.zxchem.com

The information is provided in good faith for professional evaluation. Specifications apply to the stated commercial grade; users must confirm suitability, regulatory compliance and safe handling for their intended application.