

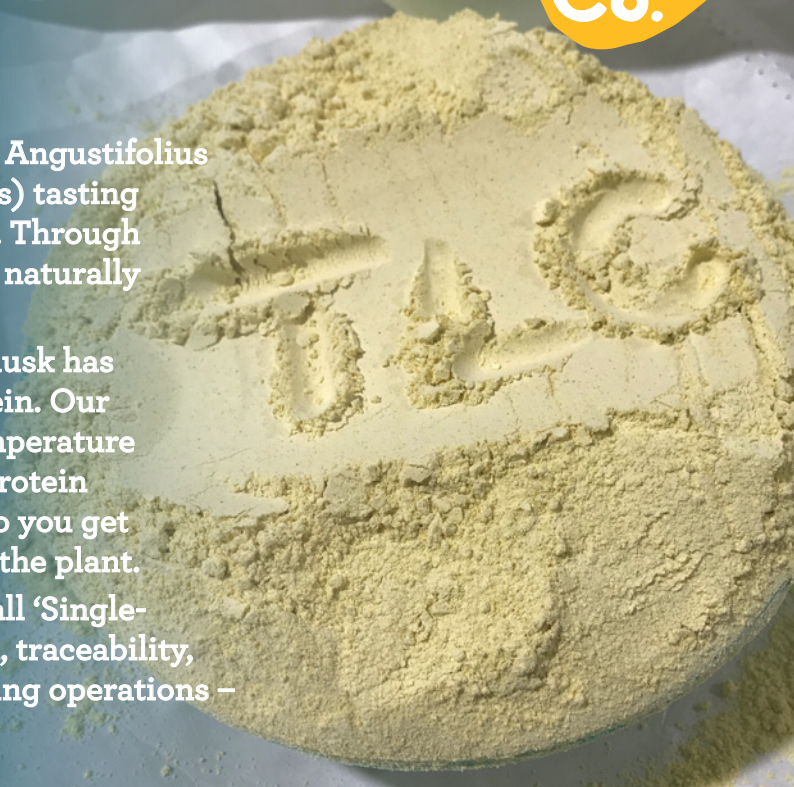
Origin: Western Australia, Australia

Product Description:

Australian Sweet Lupin (ASL) Flour is the *Lupinus Angustifolius* species, a very different species to bitter (Alkaloids) tasting South American and some European lupin species. Through classical breeding over 60 years, the ASL is a truly naturally sweet lupin, without the sugar.

Our flour is milled from the endosperm, after the husk has been removed, so this is a high value, natural protein. Our process is purely mechanical and operates at a temperature of less than 36°C, preserving the full value of the protein level availability – there is no denatured protein, so you get the full value as if you picked the bean straight off the plant.

Because of our focus on food safety our beans are all ‘Single-Origin’, providing un-equalled vertical integration, traceability, and quality systems from pristine Australian farming operations – perfect for every global family table.



Ingredients

Pure, natural, Australian Sweet Lupin and Australian Sweet Air - nothing else.

GMO status GMO free.

Storage and Shelf Life

24 months – if stored cool, dark and dry.

Particle size 80-120um

Available sizes

- 5kg plastic sealed
- 15kg paper bag, stitched
- 500kg bulk bag/tote – spout top/spout bottom.
- 1,000kg bulk bag/tote – spout top/spout bottom

HS Code 1106.10.00

Organoleptic Characteristics

- Flavour – neutral with no off flavour sometimes found with other legumes
- Aroma – Sweet, earthy, smells like the taste of wheat, dry with no off smell
- Texture – smooth, nutty mouth feel

Physical

A soft golden colour, blends easily with other dry materials. Usage like a carbohydrate, but isn't a carbohydrate.

Microbial Characteristics

- Clostridium Perfringens (CFU/g) - <10
- Coagulase Positive Staphylococci (CFU/g) - <100
- Ecoli (CFU/g) - <10
- Coliforms (CFU/g) - <10
- Enterobacteriaceae (CFU/g) - <10
- Salmonella sp /25g – not detected
- Total Plate Count (CFU/g) – 10^4 (usually shown to be less than 10^2)
- Yeast (CFU/g) - < 10^3 (usually shown to be less than 10^2)
- Mould (CFU/g) – < 10^3 (usually shown to be less than 10^2)

Certifications



Lupin FLOUR Technical Data Sheet

Protein digestibility corrected amino acid score (PDCAAS): 0.53 **

Protein Digestibility Estimated: 90 [1,2]

Allergen Data

Like many other high protein foods, lupin is an allergen in Australia and some other countries. Our facility is Gluten-free and we test to a very sensitive level to ensure this is maintained. No other allergens are used in our facility.

Nutritional Facts

Compositional Analysis

Range

Moisture (%)	9- 10
Water Activity (Aw)	0.378
Energy (per 100gm)	1350kJ
Protein (%)	38 - 41
Fat (%)	6 - 7
-Saturated fat (% of fat)	20
-Polyunsaturated fat (% of fat)	45
-Monounsaturated fat (% of fat)	35
-Cholesterol (%)	0
Ash (%)	3 - 4
Digestible Carbohydrate (%)	2.5 - 4
Dietary Fibre (g/100g)	36 - 39
Calcium (mg/100g)	110
Sodium (mg/100g)	30
Potassium (mg/100g)	810
Iron (mg/100g)	3
Magnesium (mg/100g)	160

Food Standards Australia & New Zealand range

Alkaloids (%)	<0.02
Phomopsin (ppm)	<5

Amino acid profile for lupin protein (g/100g)

Alanine	1.40
Arginine	4.80
Aspartic acid	4.50
Cysteine	0.70
Glutamic acid	9.00
Glycine	1.60
Histidine	1.00
Isoleucine	1.60
Leucine	2.90
Lysine	1.50
Methionine	0.30
Phenylalanine	1.50
Proline	2.30
Serine	2.10
Threonine	1.80
Tryptophan	0.41
Tyrosine	1.60
Valine	1.50
Cyct + Meth	1.00
Tyr + Phen	3.10
Lutein & Zeaxanthin *	4,400

* micrograms per 100g

For enquiries contact us at: sales@thelupinco.com.au

Version - April 2021 Web: www.thelupinco.com.au E: enquiry@thelupinco.com.au T: +61 8 6263 1140
Address: 1 Point Street, Fremantle, WA, 6160, Australia ABN: 69 611 053 902

*Independent NATA accredited laboratories are utilised at all times for compliance with the Foods Standards Australia & New Zealand Codes in particular 1.4.1 Clause 3 and Standard 1.4.1 Clause 5

[1] Villarino, C., Jayasena, V., Coorey, R., Chakrabarti-Bell, S. & Johnson, S. 2015. The effects of lupin (*Lupinus angustifolius*) addition to wheat bread on its nutritional, phytochemical and bioactive composition and protein quality. *Food Res. Int.* vol. 76, pp. 58-65. [2] Chew, P. G. Casey, A & Johnson, S. K. 2003, Protein quality and physico-functionality of Australian sweet lupin (*Lupinus angustifolius* cv. Gungurru) protein concentrates prepared by isoelectric precipitation or ultrafiltration. *Food Chem.* vol. 83, pp. 575-583. ** Determined by multiplying the protein digestibility (%) with the limiting amino acid score.