

VIDOGUM PRO 180 SP®

(Tara Protein)

Raw Material

VIDOGUM PRO 180 SP is 100% vegetable Tara germ protein obtained from the seeds of *Caesalpinia spinosa* (Fam. Leguminosae). Tara germ protein is rich in amino acids, protein and soluble and insoluble fibre.

Origin: Peru

Production

The Tara protein is isolated from the seed using a thermo-mechanical process only.

What is Tara Protein?

With consumers increasingly making healthier dietary decisions, food manufacturers world-wide are responding, in increasing numbers, with plant-based protein options. One of the newest plant-based alternatives comes from the wild mountains of Peru—the Tara tree/shrub (*Caesalpinia spinosa*). This small, thorny leguminous plant produces pea-style pods containing seeds. From the seed endosperm, Tara gum or Peruvian carob is produced and used as a plant-based thickener and emulsifier.

The Pre-Inca and Inca cultures of Peru discovered a wide variety of uses for Tara Pod powder that the local Indian communities still employ today. Some of these uses include treating skin irritations, urinary infections and throat aches; as well as producing black dye for clothing and leather due to the pod's high content of hydrolyzable tannins.

What the ancient Incas may not have realized is that the real benefits of Tara appear on the nutritional side of the 'equation'. Tara supplies approximately 48% of pure, vegetable-based protein; and contains 16 amino acids—including all nine (or eight depending upon your school of thought) of the essential amino acids.

Tara is gluten-free, has no additives or preservatives, is non-G.M.O., vegan, kosher, and halal; it is a source of dietary fibre, contains antioxidants and glucosinolates, and is not a tree nut or derivative.

The applications for Tara protein cover a lot of ground, from maintaining healthy functionality through dietary supplementation to antioxidation, immune and respiratory support, to weight loss and weight management.

Tara protein has a slightly nutty flavour with a smooth texture. It is soluble in hot water and partially soluble in cold water. These characteristics make it suitable for applications in the baking and pasta-making industries; for use in a variety of confectionery products, bars and snack foods. Also in the preparation of vegetable-based meat substitutes, given it "browns" nicely when heated; in protein drinks; and as a raw ingredient in the manufacture of isolated protein and amino acid extracts, to name a few.

Characteristics

VIDOGUM PRO 180 SP (Tara Protein), is raw food protein derived from the tara seed. It is rich in soluble and insoluble fibre and has a nutty flavour and yellow colour.

The protein content is between 40-50 %.

VIDOGUM PRO 180 SP is gluten and allergen-free and suitable for vegetarian and vegan diets.

VIDOGUM PRO 180 SP is rich in aspartic and glutamic acid and arginine and other essential amino acids like, e.g. leucine, lysine, Isoleucine, valine, threonine and phenylalanine.

Protein and Amino Acids

Nutritional and Physico-chemical Information:

	SPECIFICATION:			
Total Energy (Kcal):	350 - 400			
Carbohydrates:	22 - 25%			
Loss on drying:	5 - 7%			
Proteins (N x 6.25):	40 - 50%			
Fats:	10 - 13%			
Ashes:	6 - 8%			
Dietary fiber :	13 - 15%			
pH (at 1%):	4 - 6			
Tannins:	1 - 2%			
Gluten:	Absence			
Particle Size	Mesh	120	100	70
	Micrometers	125	150	212
	% intern per mesh	>80	>90	>98

AMINOACIDS	ATTRIBUTE	UoM	VALUE
Aspartic acid	-	g	0.67
Glutamic acid	-	g	0.64
Serina	-	g	0.03
Histidine	-	g	0.22
Glycine	-	g	0.57
Arginine	-	g	0.96
Threonine	-	g	0.10
Alanine	-	g	0.45
Tyrosine	-	g	0.51
Methionine	-	g	0.08
Valina	-	g	0.37
Phenylalanine	-	g	0.33
Isoleucina	-	g	0.29
Leucine	-	g	0.64
Lysine	-	g	0.35

