



United Gums Industries (Pvt.) Ltd.

Plot No. 9 & 9/1, Sector 27, Korangi Industrial Area, Karachi - 74900. Pakistan.
Tel: +92 21 35052491, 35052492 **Fax:** +92 21 35052493
Email: info@unitedgums.com & unitedgums@gmail.com
Web: www.unitedgums.com

Arson-Adv. | 021-34531176 & 86



United Gums Industries (Pvt.) Ltd.



United Gums Industries (Pvt.) Ltd.
 One of the latest Guar Gum Projects in Pakistan

www.unitedgums.com



United Gums Industries (Pvt.) Ltd.

Introduction

INTRODUCTION

The highly purified Guar Gum is obtained from the ground endosperm of *Cyamopsis tetragonolobus* (leguminosae). It consists mainly of high molecular weight hydro colloidal polysaccharide composed of galactose and mannose units combined through glycoside linkages. Which may be described as galactomannan. It is white to yellowish white, nearly odorless powder dispersed in both hot and cold water forming a solution. Having a pH between 5.5-7.5 Guar Gum has ability to rapidly hydrate in water to produce highly viscous solution.

Product Standards according to Codex Alimentarius for Guar Gum (INS# 412 E)



Product Types

PRODUCT TYPES AND IT'S SPECIFICATION

We produce and Export the following three core products.

1. Guar Meal Toasted



2. Guar Dehusked Splits



3. Guar Gum Powder



Guar Meal Toasted

S.NO.	SPECIFICATIONS	PERCENTAGE
1	Moisture	3-5%
2	Crude Protein	39.42%
3	Oil	4-6%
4	Fiber	11-14%
5	Ash	4-5%
6	Oil+Albuminoids	45% Min

Guar Dehusked Splits

S.NO.	SPECIFICATIONS	PERCENTAGE
1	Dehusking Rate	93.00% Min
2	Odor	Odorless
3	Moisture	10.00% Max
4	Black Splits	0.5% Max
5	Red Splits	0.5% Max
6	Broken Splits	1.00% Max
7	Protein	4.00% Max
8	Acid Insoluble Residue (A.I.R.)	2.0% Max
9	Fiber	0.5% Max
10	Acid Insoluble Ash	0.3% Max
11	Gum by Difference	84% (By Difference)
12	Ultimate Viscosity	6600-7000 CPS

Specifications

SPECIFICATIONS According to codex Alimentarius Guar Gum Powder

GUAR GUM FOOD GRADE	UG 35-45	UG 50-55	UG 60	UG 65-70	Codex Alimentarius Net Requirement
According to INS# 412 E	Food				
Viscosity 1% Cold water @ 25 °C. Brookfield Viscometer RVT Spindle No. 4. RPM 20 (2hours) CPS	3500-4500	5000-5500	6000	6500-7000	
Moisture %	11.5 Max	11.0 Max	10.0 Max	8.00 Max	15.0 Max
Ash %	1.00 Max	1.00 Max	1.00 Max	1.00 Max	1.5 Max
Protein %	5.50 Max	5.0 Max	4.50 Max	4.5 Max	10 Max
Acid Insoluble Residue %	4.00 Max	3.00 Max	2.50 Max	2.50 Max	7.0 Max
Gum Content %	78.0 Min	80.0 Min	82.0 Min	84.0 Min	65.0 Min
pH	5.5 - 7.0	6.0 - 7.5	6.5 - 7.5	6.5 - 7.5	6.0 - 8.0
Mesh % Through 200	95 Min	95 Min	95 Min	95 Min	95 Min
Total Plate Count (cfu/gm)	5000 Max	5000 Max	5000 Max	5000 Max	5000 Max
Yeast (cfu/gm)	100 Max	100 Max	100 Max	100 Max	500 Max
Mould (cfu/gm)	200 Max	200 Max	200 Max	200 Max	500 Max
E.Coli / gm	Negative	Negative	Negative	Negative	Negative
Salmonella /25 gm	Negative	Negative	Negative	Negative	Negative
Arsenic (ppm)	1.0 Max	1.0 Max	1.0 Max	1.0 Max	1.0 Max
Lead (ppm)	2.0 Max	2.0 Max	2.0 Max	2.0 Max	2.0 Max
Heavy Metals (ppm)	5.0 Max	5.0 Max	5.0 Max	5.0 Max	5.0 Max

QUALITY CONTROL

Well qualified & trained staff with latest laboratory equipments are used to test and monitor the production process 24 hours from the quality of seeds to the end of products i.e. Moisture, Dehusking rate, protein, A.I.R., Fiber, Mesh (ASTM), Viscosity CPS (Brookfield), sand/Silica etc.

Quality





APPLICATIONS

Baked Foods

Breads, Cakes, Pastries, etc.

Function: Used as a moisture retention agent and as a dough conditioner in baked foods. It imparts desirable binding and film forming properties that penetrates fats and oils.



Yogurt, Desserts, Mousse, Cheese, etc.

Function: It prevents syneresis in the cheese formation. Guar Gum improves texture, tenderness and maintains colour uniform and viscosity. It improves the mouth feel in dairy products.



Dairy Products

Sauces and Pickles

Sauces Pickles Barbecue Relish, Salad Dressing, etc.

Function: It improves the free flowing properties of the separation between water and oil phases. It is unique cold water binder in salad, sauces, pickles and relishes.



Chocolates, Jellies, Biscuits, etc.

Function: Guar Gum plays an important role in various confectionery products like chocolates, cream, jellies and biscuits, due to its properties of viscosity control, moisture retention, bloom control, get creation, agar and gelatin replacer, glazing agent.



Confectionery

Meat Products, etc.

Function: Guar acts as a binder and lubricants in the manufacturing of variety of meat products such as sausages. The cold water solubility and hydration of Guar Gum permits easy processing while absorbing and binding excess water.



Meat Product

Ice Cream, Soft Serves Frozen Cakes, etc.

Function: In frozen foods it controls crystal growth, prevents moisture loss, reduces freezer burn, control syneresis, prevents thaw separation & controls freezing point.



Frozen Foods

Cocoa, Drink, Fruit Juice, Sugarless & Alcoholic Beverages, etc.

Function: Guar Gum Powder is used to maintain viscosity and act as a suspending agent in fruit beverages. It improves and maintains mouth feel.



Beverages

Veterinary preparation, Calf Milk Peplacer, etc.

Function: It is a good thickener, stabilizing and suspending agent for veterinary preparations. It forms gels, retains moisture in food.



Pet Food



APPLICATIONS

Cosmetics

Lotions, Hair Shampoos & Conditioners, etc.

Function: Used as a thickening agent lubricating agent, suspending agent, detergent compatible thickener, protective colloid forming agent.



Tooth Paste, Shaving Creams, etc.

Function: Due to high viscosity, it imparts slip for extruding the paste from the tube without any excessive pressure.



Paste & Cream

Paper Industry

Wrapping & Photographic Paper, Craft, Filter, etc.

Function: Guar's cost effectiveness and properties makes it a useful polymer for paper industry. It increases fold, tensile strength pick and pulp and pulp hydration, simultaneously it decreases the porosity and improves finish for better paper quality.



Cotton Rayan, Silk, Wool sizing, Carpets Printing, etc.

Function: In sizing it increases the strength of warp thereby reducing its breakages and also reduces the dusting of sizing machine. It has a good film forming property. It is used as a dispersant thickening agent for dyes in textile printing.



Textile Printing & Sizing

Laxatives, Sustained Release Drugs, Vitamins, Syrups etc.

Function: Recent studies makes Guar Gum powder very important for pharmaceutical industries, Different quality of Guar Gum Powder Shows different major effects in medicine, it increases the intestinal transit time and increases bulk and stool.



Pharmaceuticals

Reconstitution of Fragmentation in Tobacco.

Function: Guar Gum powder is used as a binder for fragmented tobacco fins in the manufacturing of reconstituted tobacco. It is used as binding and strengthening agent.



Tobacco

Concentration of Ore, Filtration, etc.

Function: Guar Gum is used in mining industry as a floatation agent, flocculating or setting agent, foam stabilizer and in the generation of back water.



Mining

Drilling fluid, Hydraulic, etc.

Function: Guar Gum Powder is widely used in oil well drilling due to its multi-functioning such as water loss control, viscosity control, friction reduction, lubrication and cooling of the drill bits. In explosives Guar Gum Powder improves resistance to water and aging in explosives. When Guar Gum used with transition metal ions, it increases viscosity. It also works as a thickening agent in blasting slurry and for explosives mixtures.



Oil well Drilling & Explosive