



B D Guar Pvt. Ltd.

(Formerly H B Gum Industries Pvt Ltd)





About Us

We at **B.D. Guar Pvt. Ltd.** (formally H.B.Gum Ind.Pvt.Ltd.) are proud of ourselves as Pioneers in the manufacturing of guar gum product. Our firm started manufacturing and exporting of refined guar splits in **1965**. To diversify the business, we started fully automatic and continuous plant of guar gum powder in **1983**. We are exporting our products to more than **35** countries worldwide with an annual production of **5000 Mts.** per annum.

We market our product in the international market with the brand name of **"HICOL"** which means excellence. We never compromise on quality. We believe there is no substitute of quality.

We have **ISO-9000, ISO-22000, Halal, Kosher, GMP** and **GLP** certificate. Our educated staff is well experienced in the guar field for last thirty years.



B D Guar Pvt. Ltd.

(Formerly H B Gum Industries Pvt Ltd)





QUALITY CONTROL LABS Monitors the quality of raw materials, as well as semi-finished and finished products. These facilities are well-equipped to maintain quality standards across the globe.

Physical & Chemical Analysis: Guar Gum is analysed for						
Colour	Viscosity	Granulation	Moisture, pH	Protein	Acid insoluble residue	
Fat content	Ash content	Gum content	Heavy metals	Insolubles	Filterability	PCP

MICROBIOLOGICAL LABORATORY Performs bacteriological process control & testing of food grade products. It is well equipped for all types of microbiological analyses and testing.			
Standard plate count	Yeast count	Mold count	Coliform
E-coli	Salmonella	Staphylococcus	-

The following international GMP and GLP standards are impregnated with ISO 22000 (Food Safety System) with HACCP norms for complete food safety & security. **Kosher and Halal** certified food grade products. **ISO 9000 (Quality System) and ISO 22000(Food Safety system)** certified company

Key points for Good Manufacturing Practice and packing facilities

- Physical separation of raw material area, finished product storage area and packing area. Metal detector & double-control sieving system for product packaging to ensure completely contamination-free finished products.
- Exclusive container loading/stuffing station with on-the-spot container securing arrangement under the vigilance of State Govt. officials. Pest control operations are carried out by agencies of international repute.
- Full facility is well protected by a high boundary wall and security personnel are posted at factory/exit gates for round-the-clock vigilance. Strict code of conduct is followed by workers and visitors.
- Sifters and Magnets are installed in the process line to control metal and foreign contamination.





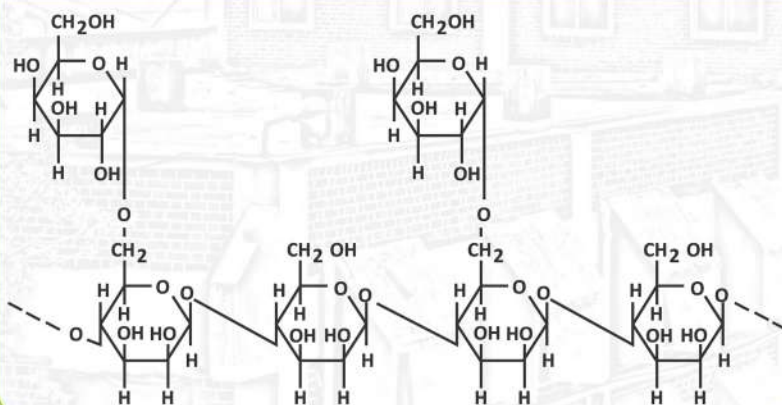
RHEOLOGY

What is Guar Gum?

Guar gum also called **guaran**, is a galactomannan. It is primarily the ground endosperm of guar beans. The guar seeds are dehusked, milled and screened to obtain the guar gum. It is typically produced as a free flowing, off-white powder.

Chemically, guar gum is a polysaccharide composed of the sugar galactose and mannose. The backbone is a linear chain of B1, 4-linked mannose residues to which galactose residues are 1,6-linked at every second mannose, forming short side-branches.

Structure of Guar Gum



Guar gum powder standards

HS-Code- 130 232 30

CAS No.- 9000-30-0

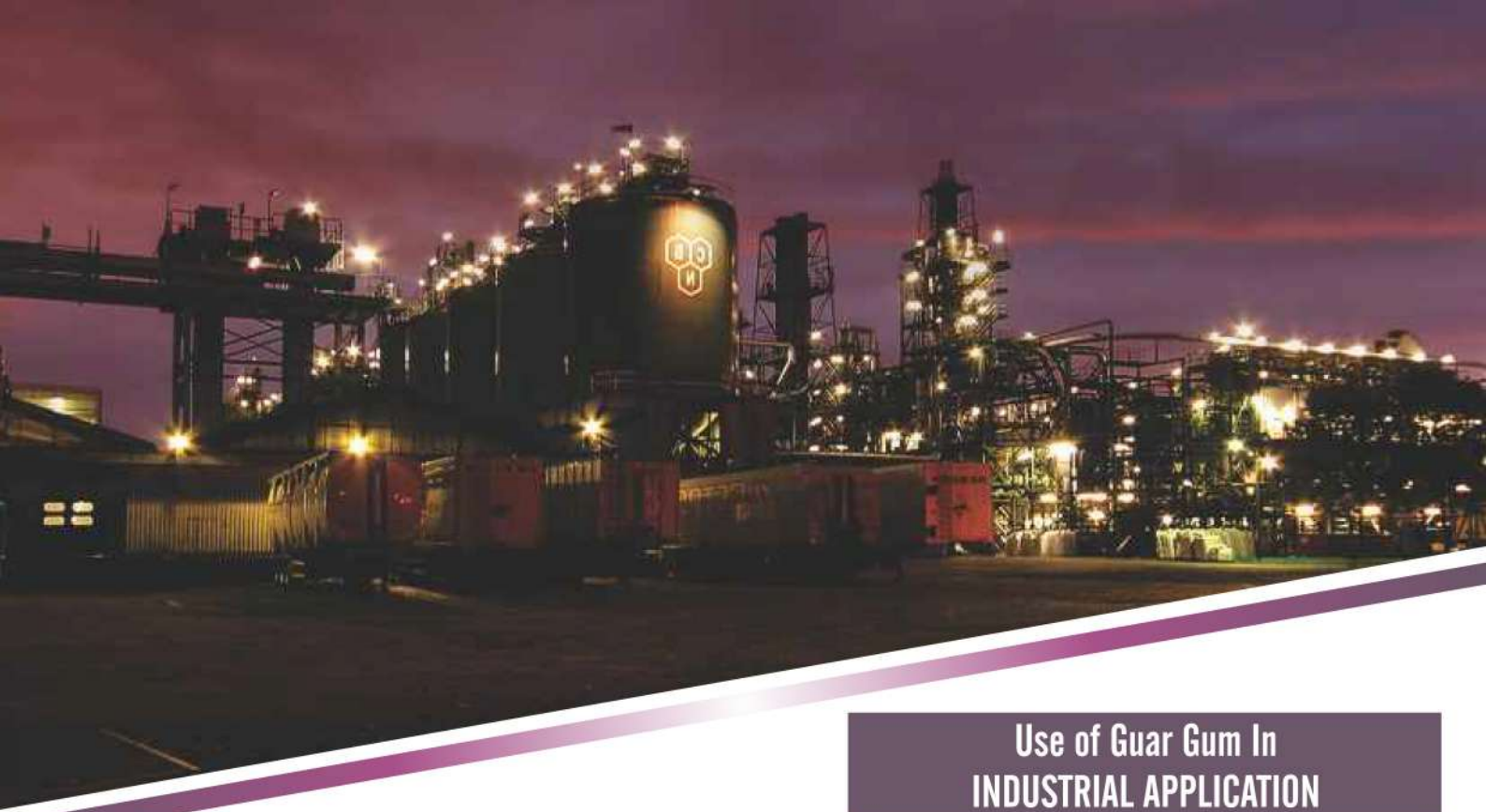
EEC No.- E 412

BT No.- 1302 3290

EINECS No. - 232-536-8

Imco Code- Harmless





Use of Guar Gum In INDUSTRIAL APPLICATION

Sr. No.	Industry	Applications	Derivatives	Functions
1	Textile Printing	Cotton, rayon silk, wool sizing, carpet printing	Carboxy-methyl guar, hydroxy propyl guar, modified guar gum	Reduces warp breakage, reduces dusting film forming thickening for dye.
2	Paper	Wrapping paper, kraft, photographic paper, filter	Oxidised guar gum, cross-linked, guar gum amino ethyl gum, modified guar gum, guar gum formate	Replaces hemi-cellulose, increase strength, fold, pick, pulp hydration, retention of fines, decreases porosity.
3	Mining	Concentration of ore, filtration	Aminoethyl guar gum, sulphate of guar gum	Flocculating and settling agent, filter aid.
4	Explosives	Stick explosives, blasting slurries	Reticulated guar gum, cyanoethyl ether of guar gum	Water proofing, gelling agent.
5	Water Treatment	Industrial water, drinking water	Food grade guar gum	Coagulant aid (food approved).
6	Tobacco	Reconstitution of fragmented tobacco	Reaction product of carboxy-methyl cellulose and guar gum	Binding agent, strengthening agent.
7	Coal Mining	Coal suspension, shock impregnation	Borate cross-linked guar gum	Friction reducing suspending agent
8	Fire Fighting	Water for fighting fires	Guar gum with ethylene glycol and glycerol	Friction reducing, dispersion and direction control.
9	Ceramic	Enamels, electro-ceramics	Chlorinated guar gum	Fixing, binding thickening agent
10	Photography	Emulsions, gelatine solutions	Borate cross-linked guar gum hydrolysed guar gum	Gelling, hardening agent.
11	Synthetic Resins	Polymerisation, suspension, collagen dispersion	Suspension of guar gum with CMC	Thickening, binding agent.



Industrial Guar Gum Grade Specification

SPECIFICATION

PRODUCT --->	HICOL G2 100/3500	HICOL USP. 200/5000	HICOL 45 UF 300/4500	HICOL 35MF 200/3500
Moisture	12% Max.	12% Max.	12% Max.	6% Max.
Protein	5% Max.	5% Max.	5% Max.	5% Max.
VISCOSITY : BV1.04B	4000 CPS Min.	5500 CPS Min.	5000 CPS Min.	4000 CPS Min.
VISCOSITY : BV103B(COLD)				
15'		3800 CPS Min.	3500 CPS Min.	3000 CPS Min.
2 Hrs	3500 CPS Min.	5000 CPS Min.	4500 CPS Min.	3500 CPS Min.
24 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.
pH	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5
MESH				
+40	NIL	NIL	NIL	NIL
-100	85% Min.	97% Min.	100%	100%
-200	20%Max	80% Min.	99% Min.	80% Min.
-300	-----	-----	95% Min.	-----



Use of Fast Hydrating Guar Gum In SHALE OIL AND GAS INDUSTRIES

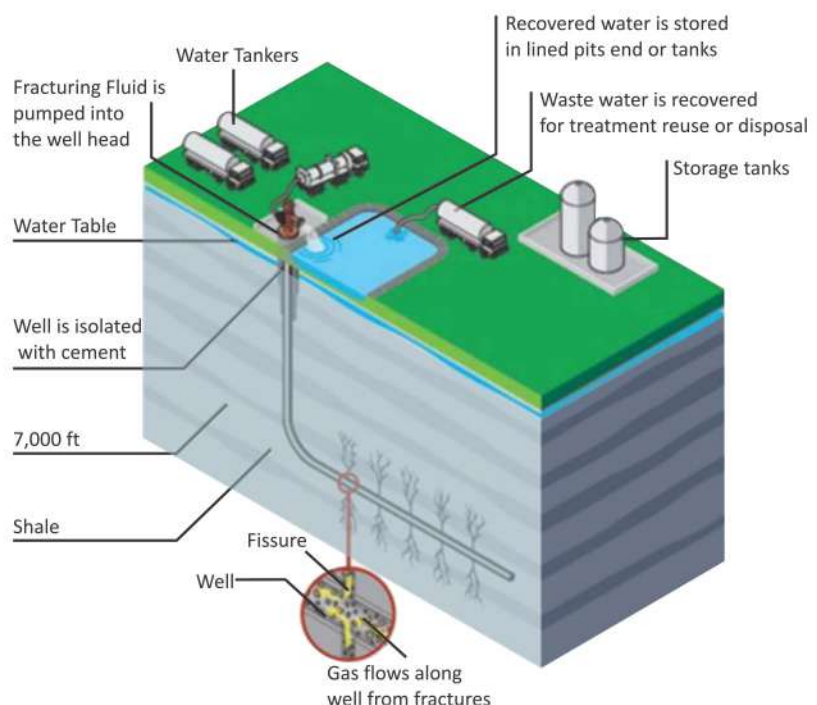
What is Fast Hydrating Guar Gum?

Fast Hydrating guar gum powder is also known as **quick hydration guar gum powder, rapid hydration guar gum powder** and **diesel slurry guar gum**.

Regular guar gum develops viscosity after two hours but fast hydrating guar gum powder develops viscosity in few minutes. it is used in shall oil and gas drilling industries.

Why Fast Hydrating Guar Gum is used in Oil and Gas industry?

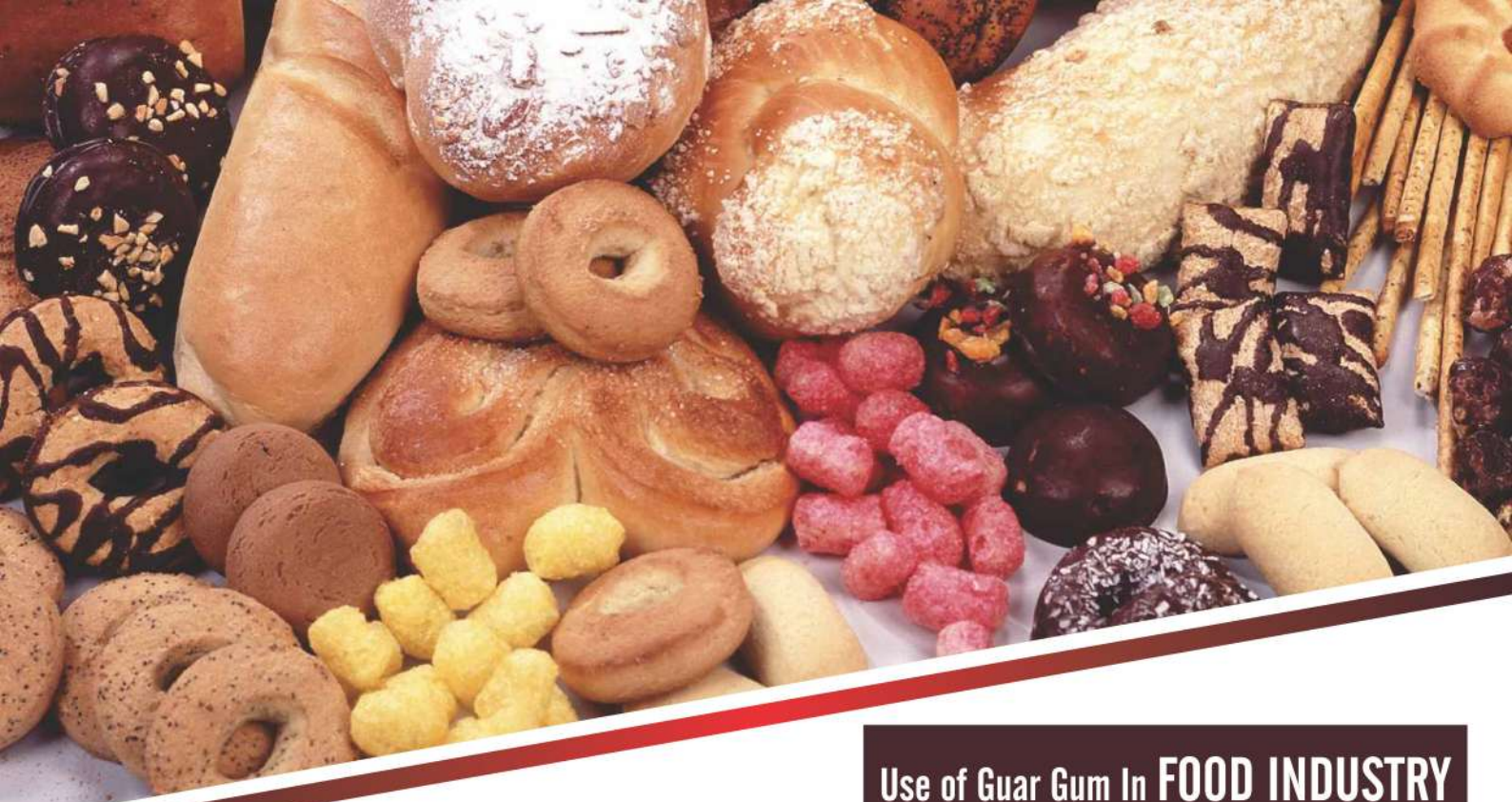
Guar Gum plays a crucial role in the fracking process. An important property is its dispersibility. The natural fast hydrating and slurriable guar is a non ionic guar, polymeric viscosifier. This yields excellent pump ability, good hydration, good thermal stability and excellent shelf life. By adjusting particle size, chemical treatment and through special additives, guar and guar derivatives can be easily dispersed with minimal agitation. Guar Gum is used to thicken the fracturing fluid so that it can carry graded sand into the fractured rock. The sand then severs as a proppant to keep the fracture open, creating a rout for oil or gas to flow to the well bore. The viscosity of hydrating slurriable guar can be reduced or broken by using enzymes, oxidizers or acids such as HCL





Fast Hydrating Guar Gum Grade Specification

SPECIFICATION				
PRODUCT --->	FHGG 28/34	FHGG 30/35	FHGG 37/42	FHGG 40/45
Moisture	6% Max.	6% Max.	5% Max.	5% Max.
Protein	5% Max.	5% Max.	5% Max.	5% Max.
Fann Viscosity Method				
Fann 35SA @ 300 rpm 497.60 ml D.I. Water + 10 Gms KCL + 2.4 Gms Guar Gum, 2 mins mix on warring blender @ 2000 rpm				
VISCOSITY				
3 mins.	28 CPS Min.	30 CPS Min.	37 CPS Min.	40 CPS Min.
1 Hrs	34 CPS Min.	35 CPS Min.	42 CPS Min.	45 CPS Min.
pH	5.5 to 7.0	5.5 to 7.0	5.5 to 7.0	5.5 to 7.0
MESH				
+40	NIL	NIL	NIL	NIL
-100	100%	100%	100%	100%
-200	95% Min.	95% Min.	95% Min.	95% Min.



Use of Guar Gum In **FOOD INDUSTRY**

Sr. No.	Industry	Applications	With	Functions
1	Frozen Foods	Ice creams, soft serves, frozen cakes	Food grade guar gum with CMC	Water retention, ice crystal inhibitor, stabiliser.
2	Bakery	Bread, cakes, pastry icing	Non-metabolised guar gum	Dough improvement, greater moisture retention, prolonged shelf life.
3	Processed Cheese	Cottage cheese, cream cheese	In combination with other water soluble gums	Increases the yield of curd solids, improves tenderness.
4	Dairy Products	Yoghurts, desserts, mousses	In combination with other water soluble gums	Inhibits when separate keeps texture after sterilisation.
5	Dressings and Sauces	Salad cream, pickles, barbecue relish	In combination with other water soluble gums	Cold water dispersible, acid resistant emulsion stabiliser.
6	Instant Mixes	Pudding, sauces, desserts, beverages	In combination with other water soluble gums	Fast, cold, dispersible thickening and texturising agent.
7	Canned Foods	Pet foods, corned meat, baby foods	In combination with other water soluble gums	Reduces splash while filling viscosity control prevention of fat migration.
8	Beverages	Cocoa drink, fruit nectar, sugarless beverages	In combination with other water soluble gums	Acid resistant thickening and suspending agent.
9	Animal Feed	Veterinary preparations, calf milk replacer	In combination with other water soluble gums	Suspending agent, granulating agent.
10	Ready to eat food	Noodles, soup packets	In combination with other water soluble gums	Thickening agent, prolonged shelf life



Food Guar Gum Grade Specification

SPECIFICATION

PRODUCT --->	HICOL 35MF 200/3500	HICOL 55MF 200/5000	HICOL 60MF 200/6000	HICOL 70MF 200/7000
Moisture	12% Max.	12% Max.	12% Max.	6% Max.
Protein	5% Max.	5% Max.	5% Max.	5% Max.
VISCOSITY : BV1.04B	4000 CPS Min.	6000 CPS Min.	6500 CPS Min.	7500 CPS Min.
VISCOSITY : BV103B(COLD)				
15'		4500 CPS Min.	5000 CPS Min.	6000 CPS Min.
2 Hrs	3500 CPS Min.	5500 CPS Min.	6000 CPS Min.	7000 CPS Min.
24 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.
pH	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5
MESH				
+40	NIL	NIL	NIL	NIL
-100	98% Min.	97% Min.	100%	100%
-200	80% Min.	80% Min.	95% Min.	95% Min.
-300	-----	-----	-----	-----
COLOUR				
Red	80 Min.	86 Min.	86 Min.	86 Min.
Blue	54 Min.	62 Min.	62 Min.	62 Min.
Green	73 Min.	80 Min.	80 Min.	80 Min.
MICRO COUNTS				
Total (Aerobic) Plate Count	5000/gm. Max.	5000/gm. Max	5000/gm. Max	5000/gm. Max
Mold	500/gm. Max	500/gm. Max	500/gm. Max	500/gm. Max
Yeast	500/gm. Max	500/gm. Max	500/gm. Max	500/gm. Max
Coliform	ABSENT	ABSENT	ABSENT	ABSENT
Salmonella	ABSENT	ABSENT	ABSENT	ABSENT



Use of Guar Gum In PHARMACEUTICAL AND COSMETICS

Sr. No.	Industry	Applications	Functions
1	Pharmaceuticals	Laxatives, slimming aids	Bulking agent bulk forming appetite depressant.
		Gastric hyper acidity	Synergistic activity with bismuth salt.
		Diabetic treatment	Reduction of urinary glucose loss.
		Cholesterol	Reducing aid.
		Vitamin formation preparation	Stable water soluble suspension.
2	Cosmetics	Ointments	Thickening agent
		Lotions	Lubricating, suspending agent.
		Tablets	Disintegrating and granulating agent.
		Hair Shampoos	Detergent compatible thickener.
		Hair Conditioners	Protective colloid film forming agent.



Pharmaceutical And Cosmetics Guar Gum Grade Specification

SPECIFICATION

PRODUCT --->	HICOL G2 100/3500	HICOL USP. 200/5000	HICOL 45MF 300/4500	HICOL 35MF 200/3500	CATIONIC GUM
Moisture	12% Max.	12% Max.	12% Max.	6% Max.	12% Max.
Protein	5% Max.	5% Max.	5% Max.	5% Max.	5% Max.
VISCOSITY : BV1.04B	4000 CPS Min.	5500 CPS Min.	5000 CPS Min.	4000 CPS Min.	-----
VISCOSITY : BV103B(COLD)					
15'		3800 CPS Min.	3500 CPS Min.	3000 CPS Min.	1500 CPS Min.
2 Hrs	3500 CPS Min.	5000 CPS Min.	4500 CPS Min.	3500 CPS Min.	2200 CPS Min.
24 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	90% of 2 Hrs.	2200 CPS Min.
pH	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5	5.2 to 6.5	6.0 to 7.0
MESH					
+40	NIL	NIL	NIL	NIL	NIL
-100	85% Min.	97% Min.	100%	100%	97%
-200	20% Min.	80% Min.	99% Min.	80% Min.	80% Min.
-300	-----	-----	95% Min.	-----	-----
MICRO COUNTS					
Total (Aerobic) Plate Count	3000/gm. Max.	3000/gm. Max	3000/gm. Max	3000/gm. Max	3000/gm. Max
Mold	200/gm. Max	200/gm. Max	200/gm. Max	200/gm. Max	200/gm. Max
Yeast	200/gm. Max	200/gm. Max	200/gm. Max	200/gm. Max	200/gm. Max
Coliform E-coli	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT
Salmonella	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT



B D Guar Pvt. Ltd.

(Formerly H B Gum Industries Pvt Ltd)

Factory

11-B, GIDC, Kalol - 382 725
(North Gujarat) INDIA

Phone: -91-2764-220053 / 223198

Fax: +91-2764-220057

E-mail: sales@bdguar.com

Regd. Office

905, Akik Building, Opp.Rajpath club,
S.G.Road, Ahmedabad -380015
Gujarat, India

Phone: +91-79-66611177, 66623222

Mobile: +91-9879610774, 9879609770

Email: sales@bdguar.com

