

Specs #: DSXG46	Version #: 007	Issue date: 2012.03.01
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Ziboxan® PM80 Specification

Ziboxan® PM80-Xanthan Gum Pharmaceutical Grade

DESCRIPTION:

Ziboxan® PM80 is a normal powder xanthan gum produced by fermentation of a carbohydrate with *Xanthomonas campestris*. It is specifically used in pharmaceutical and cosmetic applications as a stabilizer, thickener or emulsifier.

SPECIFICATION:

Properties	Specifications
Appearance	cream colored powder
Viscosity (1% solution in 1% KCL)	1200-1600mPa.s(cP)
pH (1% solution)	6.0-8.0
Loss on Drying	max. 13%
Ash	max. 13%
Particle size	100% through 60mesh(250micro) min. 95% through 80mesh (180micro)
V1/V2	1.02-1.45
Pyruvic acid	min. 1.5%
Heavy metal	max. 20ppm
Lead	max. 2ppm
Arsenic	max. 3ppm
Microbiological	
Total plate count	not more than 500cfu/g
Yeast/mold	less than 100cfu/g
E. coli	absent/25g
Salmonella	absent/25g
<i>Staphylococcus aureus</i>	absent/g
<i>Pseudomonas aeruginosa</i>	absent/g

PACKAGE:

Carton box or multiple paper bag of 25kg net each or equivalent. Custom packaging available.

STORE:

Sealed and stored in cool dry conditions.

SHELF LIFE:

Two years.

QUALITY AND SAFETY ASSURANCE:

Ziboxan® PM80 production is controlled under certified quality system ISO9001 and product safety is ensured by an established safety system.

NOTE:

Kosher Approved

Halal Certified

ISO9001

HACCP

GMP

TEST METHOD: Full details and test methods are available on request.

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1. **Appearance**
By visual.
2. **Viscosity (1% Solution)**
Prepare a 1% salt solution of product by slowly adding a dry blend of 3.0 g of product and 3.0 g of potassium chloride to 250 ml of distilled or deionized water in a 400 ml beaker, while stirring at 800 rpm using a low-pitched propeller type stirrer. Add an additional 44 ml of distilled or deionized water, rinsing the walls of the beaker, and continue stirring at 800 rpm for 2 hours. At the end of this period, adjust the temperature of the solution to 25°C (77°F), stirring by hand in a vertical motion to eliminate any layering effects. Measure the viscosity immediately using Brookfield LV viscometer at 60 rpm, with spindle no. 3, at 25°C.
3. **pH**
Measure the pH at 25°C by testing a solution prepared as above, but omitting the potassium chloride, using a pH meter.
4. **Loss on Drying**
Spread 2-5 g product evenly on a pre-dried tared watched glass and weigh accurately. Dry in an oven at 105 ± 1°C for 2.5 hours. Cool in a desiccator and re-weigh.
5. **Ash**
Using a suitable furnace, ash 3 g of product, pre-dried at 105 °C for 4 hours, in a platinum crucible at 650 °C until no carbon remains.
6. **Particle Size**
Sieve 20 g product on the specified British Standard Screens for 10 minutes each screen. Record the weight of product remaining on each screen and calculate the percentage which passes through each specified screen.
7. **V1/V2**
V1/V2 may be determined by FCC V for xanthan gum.
8. **Pyruvic acid**
Use the procedure defined in the current FCC V for xanthan gum.
9. **Total Heavy Metals**
These metals may be determined by USP28
10. **Lead**
Lead may be determined by USP28
11. **Arsenic**
Arsenic may be determined by USP28
12. **Microbiological Limits**
For bacteria (TVMAC), yeast and mold *E coli*, *salmonella* follow the procedures as given for microbial limit tests in the current edition of the USP28. Method for coliform is available on request. For bacteria, plate out 4 ml of 0.25% solution and incubate for 48 hours at 35-37degrees C. For yeast and mold plate out 4 ml of 0.25% solution on acidified potato dextrose agar and incubate for 5 days at 25-28 degrees C. Express results as colony forming units (c.f.u.) per gram.