

Product Information

Xanthan Gum FN & Xanthan Gum FF

Food & Pharmaceutical Grade

General Information

Xanthan gum is a natural occurring high-molecular weight polysaccharide and is produced by fermentation. It is soluble in cold and hot water and forms highly viscous, pseudoplastic solutions. Its unique combination of physical and chemical properties makes it an excellent thickener and stabilizer for many foods, cosmetic and pharmaceutical applications.

Jungbunzlauer offers food & pharmaceutical grade xanthan gum in two standard particle sizes: Xanthan Gum FN (normal, 80 mesh) and Xanthan Gum FF (fine, 200 mesh).

Features and Benefits

- imparts high solution viscosity even at low concentrations
- pseudoplastic rheological properties (i.e. is shear thinning)
- exhibits low viscosity during processing but fully recovers viscosity after shearing
- excellent suspending and stabilizing properties
- soluble in both cold and hot water
- provides freeze-thaw stability
- synergistic interaction with galactomannans, such as guar, locust bean and tara gum

Compatibility

- compatible with practically all commercially available thickeners and stabilizers
- stable over a wide range of pH and temperatures
- compatible with and stable in systems containing high concentrations of salt; for additional stability at high salt concentrations we recommend using our salt tolerant grade ST
- resistant to enzymatic degradation
- compatible with up to 50% aqueous solutions of ethanol without formation of precipitate

Legal Aspects

All Jungbunzlauer food grade xanthan gum types fulfil the purity requirements of all relevant food and pharmaceutical regulations. Therefore, Jungbunzlauer food grades are not only permitted in food but also in pharmaceutical and cosmetic applications.

In the European Union, xanthan gum is listed as generally permitted food additive (E415) and may be added to all foodstuffs, following the “quantum satis” principle, with only few limitations as found in regulation (EC) 1333/2008. In the USA the Food and Drug Administration (FDA) has affirmed xanthan gum as food additive permitted for direct addition to food for human consumption (21 CFR § 172.695).

All xanthan gum grades from Jungbunzlauer are manufactured without GMO and only traceable non-GMO raw materials are used. Therefore, there are no GMO labelling requirements for Jungbunzlauer Xanthan Gum according to regulations (EC) No 1829/2003 and 1830/2003.

Jungbunzlauer Xanthan Gum FN and Xanthan Gum FF are Kosher and Halal approved. The products are also suitable for vegetarian and vegan diets.

Standard Packaging and Storage

Jungbunzlauer Xanthan Gum FN and Xanthan Gum FF are available in 20 kg corrugated cardboard boxes with inner polyethylene lining.

Xanthan Gum FN and Xanthan Gum FF should be stored in a cool (max. 30 °C) and dry (max. 70% rel. humidity) place in closed containers. For this product, Jungbunzlauer guarantees a shelf life of 3 years from the date of manufacture when stored under these conditions.

In its powder form, Xanthan Gum FN and Xanthan Gum FF are resistant to microbial degradation. The use of a preservative is recommended when solutions of xanthan gum are to be stored for more than 24 hours.

Particle Size Distribution of Standard Grades

The following graph shows the typical particle size distribution of Jungbunzlauer Xanthan Gum FN and Xanthan Gum FF. The particle size is plotted on the x-axis, while the y-axis indicates the relative, accumulated amount of particles of the particle size.

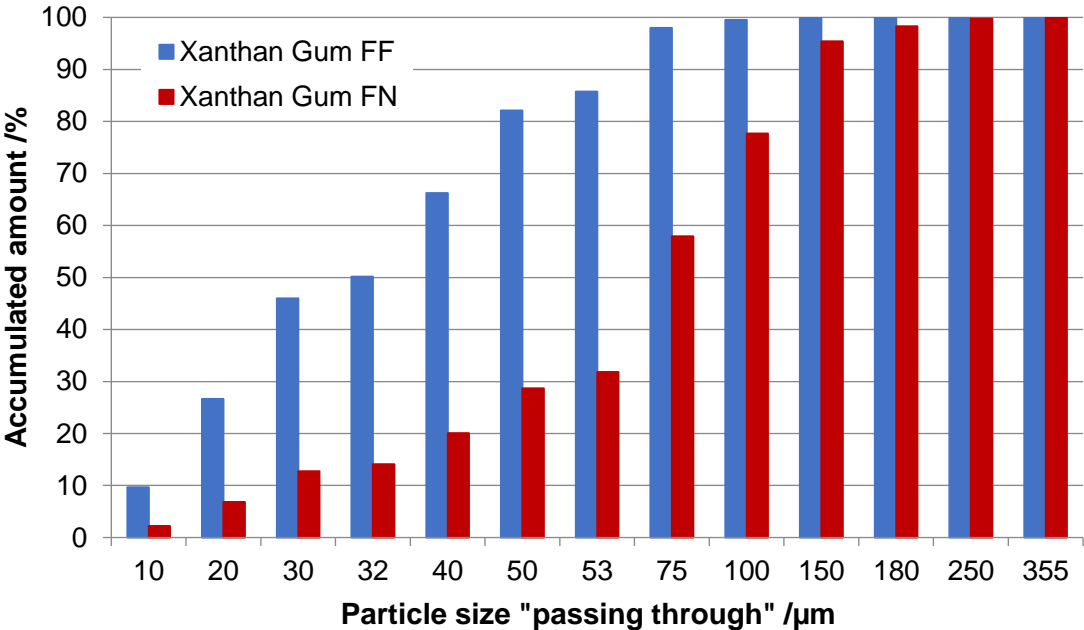


Figure 1: Typical particle size distribution of the Jungbunzlauer Xanthan Gum FF and Xanthan Gum FN.

The figure shows that Jungbunzlauer Xanthan Gum FN has a particle size distribution, which is shifted more to larger particle sizes than our fine grade FF. Our standard grade JBL XG FF is very finely ground in order to meet your needs for specific applications, such as instant mixes and bakery applications.

Technical Service

For further information, our technical service specialists are always at your disposal. Samples, detailed specifications and application literature are available upon request.

Specifications

We herewith confirm that Jungbunzlauer Xanthan Gum FN and Jungbunzlauer Xanthan Gum FF are specified to meet the requirements of the latest edition of the European Pharmacopoeia (Ph. Eur.), the United States Pharmacopeia (USP), the Food Chemicals Codex (FCC) and of Commission Regulation (EU) No 231/2012.

All analytical methods are in accordance with the latest requirements of the Ph. Eur., the USP, the FCC or are equivalent. Specific test methods are available on request.

Product name: **Xanthan Gum FN**
 EC No.: 234-394-2
 CAS No.: 11138-66-2
 E-No.: E 415

Parameters	Jungbunzlauer Limits
Granulation:	
- through 60 mesh (< 0.250 mm)	min. 99%
- through 80 mesh (< 0.180 mm)	min. 95%
Viscosity:	
- 1% xanthan gum in 1% KCl solution (60 rpm)	1400 – 1600 mPa·s
Viscosity Ratio V1:V2	1.02 – 1.45
Description	free flowing powder
Identification	conforms
Assay	91.0 – 108.0%
Loss on Drying	max. 12.0%
pH (of 1% solution)	6.0 – 8.0
Isopropyl Alcohol	max. 500 mg/kg
Powder Colour	min. 60
Pyruvic Acid	min. 1.5%
Ash	6.5 – 16.0%
Nitrogen	max. 1.5%
Arsenic	max. 2 mg/kg
Lead	max. 2 mg/kg
Mercury	max. 1 mg/kg
Cadmium	max. 1 mg/kg
Total Aerobic Microbial Count	max. 1000 cfu/g
Escherichia coli	negative/25 g
Salmonella spp.	negative/25 g
Bile-tolerant gram-negative bacteria	negative/g
Pseudomonas aeruginosa	negative/g
Staphylococcus aureus	negative/g
Total Yeast and Mould Count	max. 100 cfu/g
Viable Cells of Xanthomonas campestris	negative/g

Product name: **Xanthan Gum FF**
 EC No.: 234-394-2
 CAS No.: 11138-66-2
 E-No.: E 415

Parameters Jungbunzlauer Limits

Granulation:	
- through 80 mesh (< 0.180 mm)	min. 99%
- through 200 mesh (< 0.075 mm)	min. 92%
Viscosity:	
- 1% xanthan gum in 1% KCl solution (60 rpm)	1400 – 1600 mPa·s
Viscosity Ratio V1:V2	1.02 – 1.45
Description	free flowing powder
Identification	conforms
Assay	91.0 – 108.0%
Loss on Drying	max. 12.0%
pH (of 1% solution)	6.0 – 8.0
Isopropyl Alcohol	max. 500 mg/kg
Powder Colour	min. 60
Pyruvic Acid	min. 1.5%
Ash	6.5 – 16.0%
Nitrogen	max. 1.5%
Arsenic	max. 2 mg/kg
Lead	max. 2 mg/kg
Mercury	max. 1 mg/kg
Cadmium	max. 1 mg/kg
Total Aerobic Microbial Count	max. 1000 cfu/g
Escherichia coli	negative/25 g
Salmonella spp.	negative/25 g
Bile-tolerant gram-negative bacteria	negative/g
Pseudomonas aeruginosa	negative/g
Staphylococcus aureus	negative/g
Total Yeast and Mould Count	max. 100 cfu/g
Viable Cells of Xanthomonas campestris	negative/g

The information contained herein has been compiled carefully to the best of our knowledge. We do not accept any responsibility or liability for the information given in respect to the described product. Our product has to be applied under full and own responsibility of the user, especially in respect to any patent rights of others and any law or government regulation.
