



## GALACTOSE-DEPLETED GUAR GM (21%) (Lot 10502a)

**P-GGM21**

**10/15**

**CAS NO. 11078-30-1**

**PROPERTIES:**

**Viscosity:** 11 dL/g (Ubbelohde suspended-level viscometer, 25°C).  
**Molecular Weight:** 350,000 Daltons (Multi-angle laser light scattering).  
**Protein:** 0.41%  
**Moisture:** 3.0%  
**Sugar ratio:** Galactose: Mannose = 21/79.

Galactose-depleted guar galactomannan is prepared by treatment of high viscosity guar galactomannan with a pure  $\alpha$ -galactosidase from guar. The reaction is terminated with heat, and the modified galactomannan is purified and recovered by alcohol precipitation.

**STORAGE CONDITIONS:**

Store dry at room temperature in a well sealed container. Under these conditions, the product is stable for several years.

**METHOD OF DISSOLUTION:**

Weigh 0.2 g galactomannan into a 120 ml dry pyrex beaker. Wet the sample with 2 ml of 95% ethanol and add a magnetic stirrer bar, followed by 90 ml of distilled water. Gently stir the slurry on a magnetic stirrer and store at 4°C overnight to allow the polymer to fully hydrate. Place the beaker on a magnetic stirrer-hotplate and heat at a setting of 120°C with vigorous stirring. Loosely cover the beaker with aluminium foil. When the solution begins to boil, turn the heat off, but continue stirring until the galactomannan is completely dissolved (about 20 min). Adjust the solution volume to 100 ml. The solution may be slightly turbid, but this turbidity (due to trace amounts of denatured protein) can be removed by centrifugation at 12,000g for 10 min.

Solutions of guar galactomannan can be stored at room temperature for several weeks in a well sealed storage bottle. Microbial contamination is prevented by adding two drops of toluene to the storage bottle.