



MANNAN (1,4- β -D-MANNAN) (Lot 131001b)

P-MANCB
CAS NO. 9036-88-8

03/17

PROPERTIES:

Protein Content: ~ 0.3% (Nitrogen x 5.7)

Physical Description: Odourless, white powder.

PREPARATION:

This mannan is prepared by hydrolysis of carob galactomannan with pure *Cellvibrio japonicus* β -mannanase (with heat inactivation), followed by treatment with guar-seed α -galactosidase to remove essentially all of the α -linked D-galactosyl residues. The mannan which forms precipitates from solution and is recovered by centrifugation and washed with cold water. The mannan is then re-dissolved in 5% sodium hydroxide and reduced with sodium borohydride. On neutralisation with acetic acid, the mannan precipitates from solution and is washed with ethanol and recovered.

This mannan is a useful substrate for the measurement of 1,4- β -D-mannanase assay using a reducing sugar method.

SOLUBILITY:

Insoluble in water. Can be dissolved at 20 mg/mL in 5% w/v sodium hydroxide.

On neutralisation with 50% acetic acid, the mannan precipitates from solution as a very fine colloidal suspension. The suspension should be mixed gently by swirling the container by hand before removing aliquots for use in enzyme assays.

SUGAR COMPOSITION:

Mannose: 98%;
Galactose: ~ 1%.