Megazyme Building 1,
Bray Business Park,
Bray, Co. Wicklow,
A98 YV29,
Ireland.
Tel: + 353 1 2861220 Fax: + 353 1 2861264

Certificate of Analysis

Product: Galactomannan (Carob; Low Viscosity)
Cat. No: P-GALML
Lot. No: 150901A
Expiry Date: N/A

Parameter	Specification	Results
Purity	> 94% (dw basis)	94%
Viscosity	5 – 15 cSt at 1% Solution	13 cSt*
Sugar Ratio (Galactose:Mannose)	Approx 25:75	24:76
Protein	< 2%	1.6%
Moisture	< 5%	3.0%
Ash	< 1%	0.6%

*1% w/v solution, 30°C, Ostwald C-type viscometer.

Sugar Composition:
Galactose : Mannose = 24 : 76

This lot meets our specification.

Signature: Ciara McLoughlin **Date:** 26.Apr.2024

Ciara McLoughlin

Quality Manager

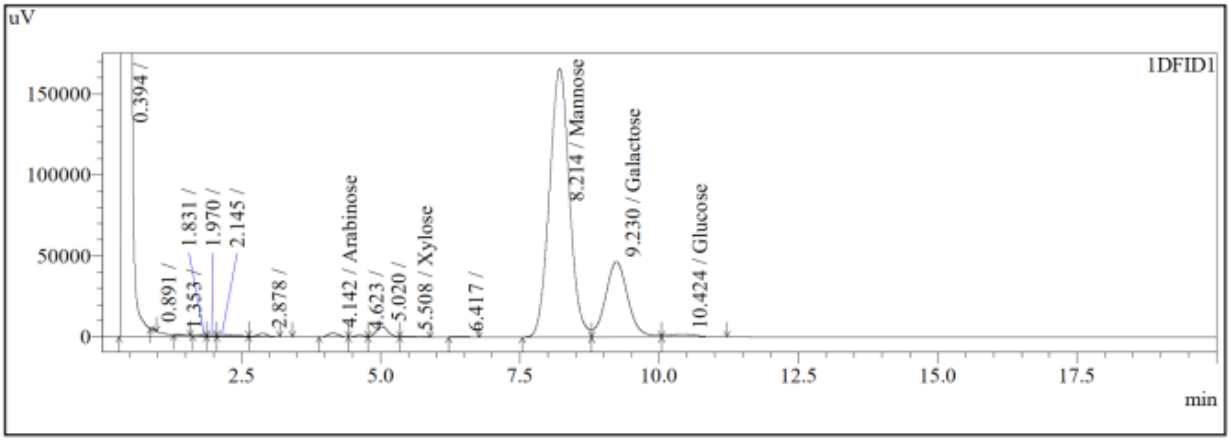
(*as this certificate is a computer printout, it has not been signed or dated by hand*)

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GC:

Gas liquid chromatography of the alditol acetates derived from hydrolysis and derivatization of low viscosity Carob Galactomannan (Lot 150901A)



GLC:

A typical polysaccharide sample (~ 10 mg) was hydrolysed using 2N TFA at 120ºC for 60 min. Subsequent sodium borohydride reduction was performed in 1N NH4OH for 90 minutes at 40ºC. The corresponding alditol acetates were prepared using acetic anhydride and 1-methyl imidazole, extracted into DCM and analysed by GC. Chromatography was performed on a Shimadzu GC-14B with CHROMATOPACK C-R8A using a Packed glass column (6 ft x 5 mm OD, 3 mm ID) with 3% Silar 10C on W-HP (80-100 mesh). The carrier gas was nitrogen at 130 KPa. Injector temperature; 250ºC; Column temperature 230ºC. Detection by FID with 60KPa H2 pressure and 50 KPa air pressure.

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