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

Certificate of Analysis

Product: Amylose (Potato)
Cat. No: P-AMYL
Lot. No: 220201
Expiry Date: N/A

Parameter	Specification	Results
Purity	> 90% (dw basis)	92.5 %
Protein	< 0.5%	0.05 %
Moisture	< 15%	11%
Ash	< 5%	0.5 %

Solubility:
Practically insoluble (< 1mg/mL) in water.

Sugar Composition:

Glucose	95.46%
Arabinose	2.4%
Other sugars	2.14%

This lot meets our specification.

Signature: 

Date: 20.May.2022

Ciara McLoughlin
QC Specialist

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

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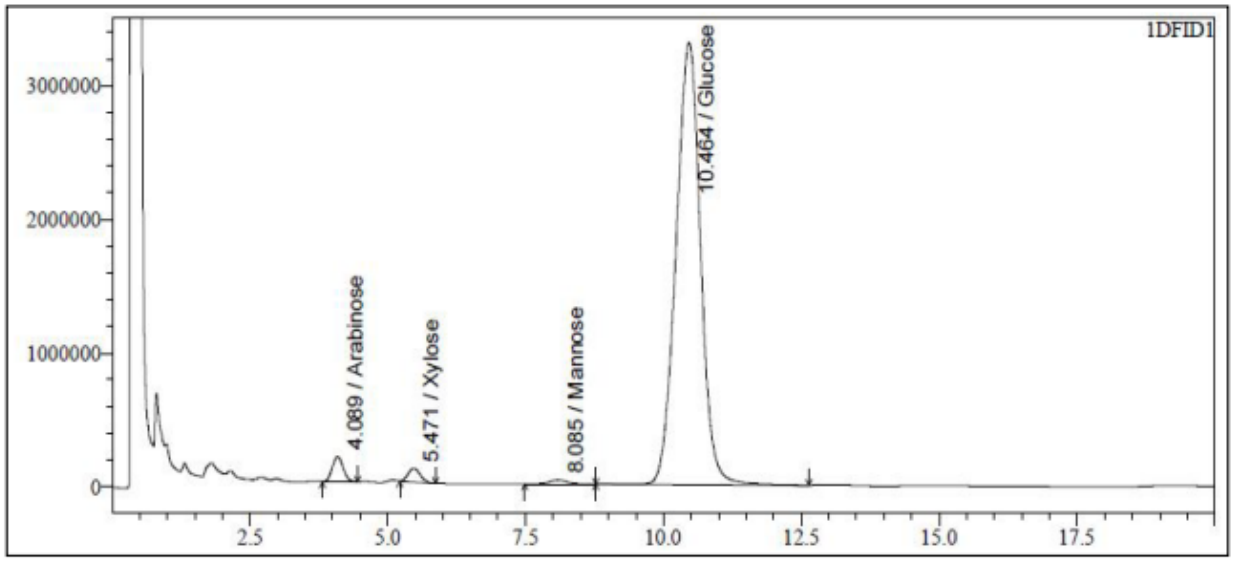
GC:

Gas liquid chromatography of the alditol acetates derived from hydrolysis and derivatization of Amylose (Potato) (Lot 220201)



Determination of Amylose/Amylopectin:

Amylose content was determined using Megazyme's Amylose/Amylopectin Assay Kit (K-AMYL)

Sample	Amylose Content %
Amylose (Potato) (**P-AMYL**) (Lot 220201)	92.49
High Amylose Maize Starch (Lot 10101a)	66.20

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GLC:
A typical polysaccharide sample (~ 10 mg) was hydrolysed using 2N TFA at 120°C for 60 min. Subsequent sodium borohydride reduction was performed in 1N NH4OH for 90 minutes at 40°C. 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 (6ft x 5 mm OD, 3mm ID) with 3% Silar 10C on W-HP (80-100 mesh). The carrier gas was nitrogen at 130 KPa. Injector temperature; 250°C; Column temperature; 230°C. Detection by FID with 60KPa H2 pressure and 50 KPa air pressure.

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