

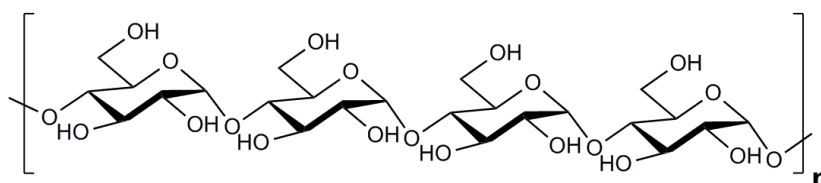
AMYLOSE (Potato) (Lot 160501)

P-AMYL

07/16

CAS: 9005-82-7

STRUCTURE:



Schematic representation of an amylose subunit composed by α -(1,4) linked glucose monosaccharides.

PROPERTIES:

Purity:	> 98%
Sugar Composition:	Glucose 97.6%, Arabinose 1%, Other 1.25%
Protein:	0%
Moisture:	11.97%
Ash:	3.5%
Physical Description:	White powder

STORAGE CONDITIONS:

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

WATER SOLUBILITY:

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

DETERMINATION OF AMYLOSE/AMYLOPECTIN:

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

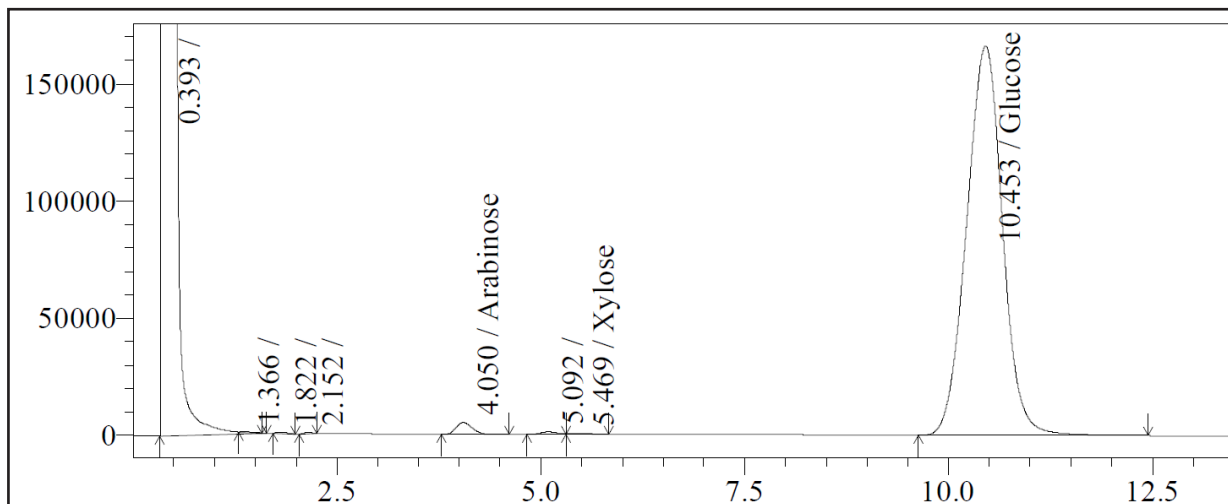
Sample	Amylose Content %
Amylose (Potato) (Lot 160501)	98.49
High Amylose Maize Starch (Lot 50904b)	66.09
Wheat Starch (Lot 40902c)	29.11

GLC ANALYSIS:

A typical polysaccharide sample (~ 10 mg) was hydrolysed using 2 M TFA at 120°C for 60 min. Subsequent sodium borohydride reduction was performed in 1 M NH₄OH for 90 min at 40°C. The corresponding alditol acetates were prepared using acetic anhydride and 1-methyl imidazole, extracted into CH₂Cl₂ and analysed by GC.

GLC system: Shimadzu GC-14B with CHROMATOPAC C-R8A
 Column: Packed glass column (6 ft x 5 mm OD, 3 mm ID) with 3% Silar 10C on W-HP (80-100 mesh).
 Column temperature: 230°C
 Injector temperature: 250°C
 Mobile phase: Nitrogen gas
 Flow rate: 130 KPa
 Detector: FID with 60 KPa H₂ pressure and 50 KPa air pressure

Gas liquid chromatography of the alditol acetates derived from hydrolysis and derivatisation of Amylose (Potato) (Lot 160501)



Peak Results

Name	RT (min)	Area	% Area
Arabinose	4.050	74192	1.43
Glucose	10.453	5093137	97.86
Other		36939	0.71