

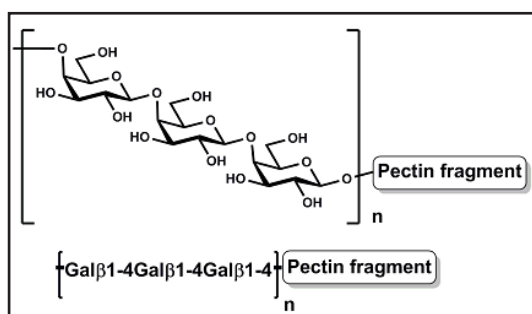
PECTIC GALACTAN (Potato) (Lot 150801b)

P-PGAPT

07/21

CAS:

STRUCTURE



Schematic representation of pectin galactan (potato)

PREPARATION

Pectic galactan (potato) is prepared by alkaline extraction of potato fibre followed by enzymic treatment of the extract to remove other polysaccharides.

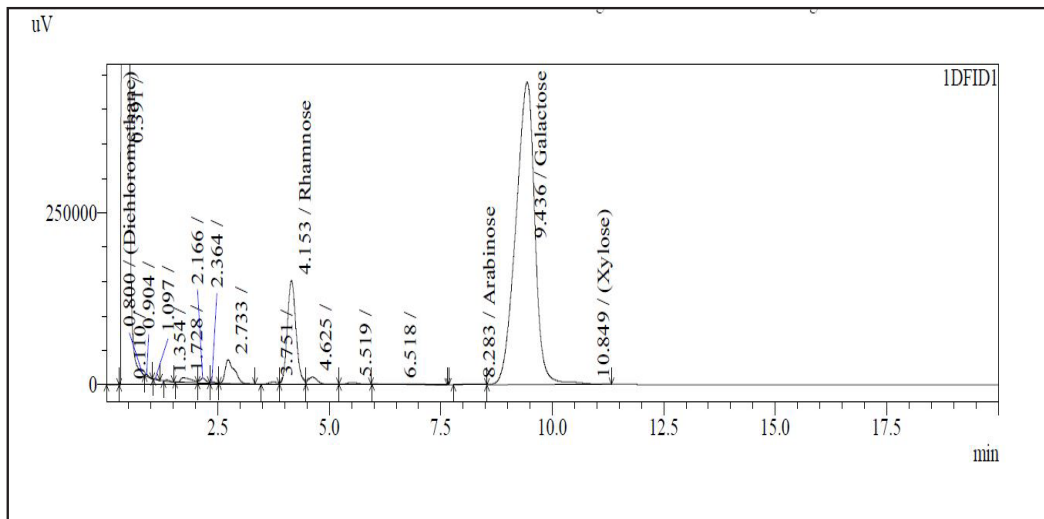
PROPERTIES

Purity:	≥ 90%
Sugar Composition:	Galactose 74%, arabinose 0.1%, rhamnose 11.4%, galacturonic acid 10%, other sugars 4.5%
Protein:	0.9%
Ash:	5.1%
Physical Description:	Off-white, odourless powder
Solubility:	Soluble in water

DISSOLUTION

Pectic galactan (1 g) is added to 95 mL of vigorously stirring distilled water at about 50°C, and stirring is continued until the pectic galactan completely dissolves (about 10 min). The solution is cooled to room temperature, and the volume is adjusted to 100 mL. This solution is stored in a well-sealed glass container. Microbial contamination is prevented by the addition of a few drops of toluene to the container. Store at 4°C.

Gas liquid chromatography of the alditol acetates derived from hydrolysis and derivatisation of medium viscosity pectic galactan (potato) (Lot 150801a)



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 (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; 250°C; Column temperature; 230°C. Detection by FID with 60KPa H₂ pressure and 50 KPa air pressure.