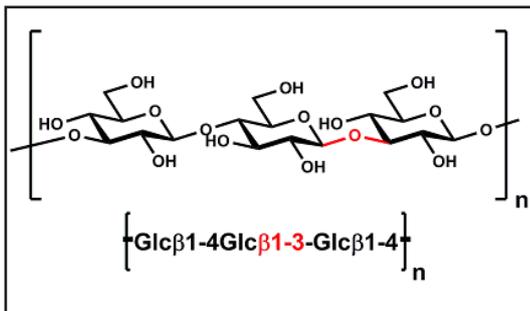


LICHENAN (Lot 80403a)

CAT. NO: P-LICHN
CAS: 1402-10-4

07/20

STRUCTURE



Schematic representation of lichenan

DESCRIPTION

Lichenan is a linear, 1,3:1,4- β -D glucan with a structure similar to that of barley and oat β -glucans. Lichenan has a much higher proportion of 1,3- to 1,4- β -D linkages than do the other two glucans. The ratio of 1,4- to 1,3- β -D linkages is approximately 2:1.

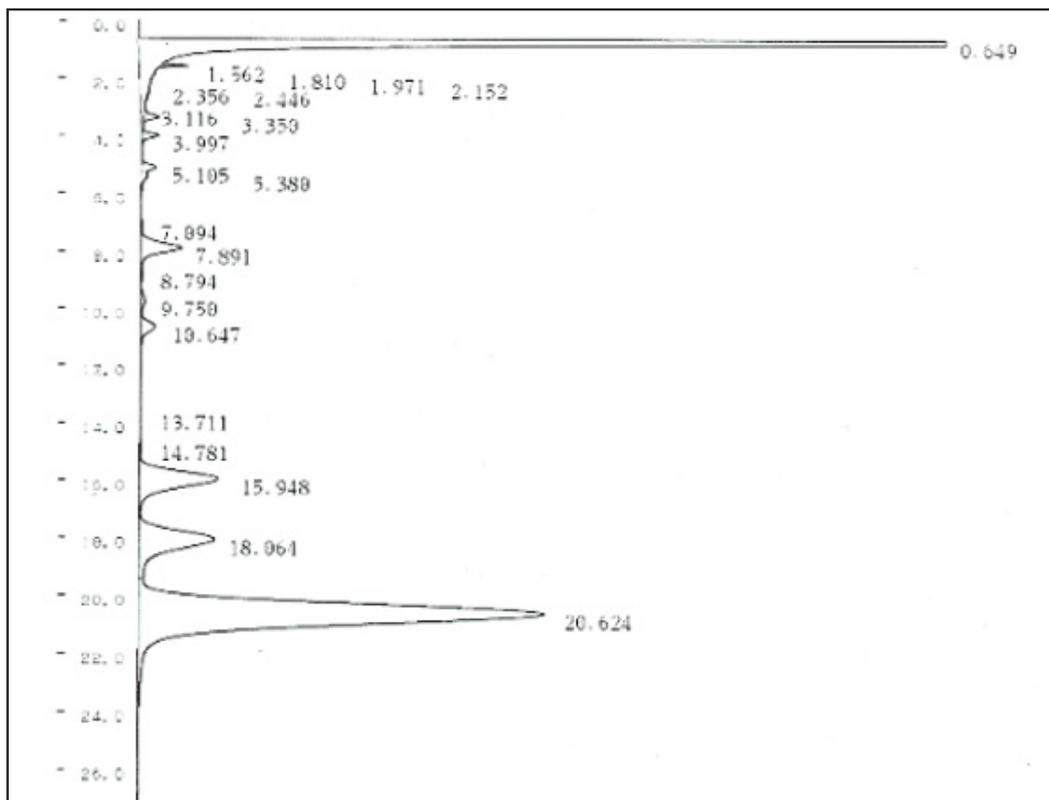
PROPERTIES

Purity:	$\geq 75\%$
Protein Content:	1.8% (Nitrogen \times 6.25)
Physical Description:	Odourless, off-white powder.
Solubility:	Soluble in hot water.

Sugar Composition (Lot 80402)

Glucose	77.3%
Arabinose	2.7%
Mannose	8.0%
Xylose	1.0%
Galactose	9.2%
Other Sugars	1.8%

Gas liquid chromatography of the alditol acetates derived from hydrolysis and derivatisation of Lichenan (Lot 80403a)



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.

STORAGE CONDITIONS

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