



Frequently Asked Questions

Arabinan (Sugar Beet)

Q. 1: I have purchased sugar beet arabinan plus rye and wheat flour arabinoxylans. I would like any information that you could provide on the structures of these polymers.

A: Sugar Beet Arabinan – this is a polymer of 1,5- α -L-linked arabinofuranose units which is highly substituted by 1,3- and (1-2?) linked single α -L-arabinofuranose residues.

About 50% of 1,5 linked arabinosyl residues in the main chain are substituted by 1,3 or 1,2 linked arabinofuranosyl branches.

Rye/Wheat Arabinoxylan – These simply are composed of 1,4- β -D-linked xylan main chains (about 500-1000 residues); substituted by α -L-arabinofuranosyl residues linked 1,3- α or 1,2- α . They differ in the extent of substitution by α -L-arabinofuranose. They also contain some ferulic acid residues (linked to arabinose).

Q. 2. What is the molecular weight of Arabinan (Polysaccharide)?

A. The molecular weight is approximately 15,000 daltons based on HPLC on Fractogel TSK G4000 PN.