

## ARABINOXYLAN (Wheat Flour; Insoluble)

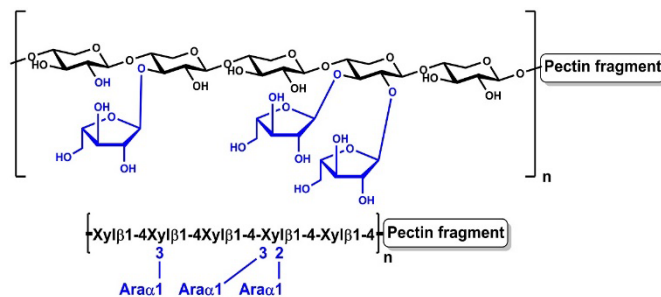
08/23

### P-WAXYI

**CAS:** 9040-27-1

**Source:** Wheat

### STRUCTURE:



Schematic representation of wheat arabinoxyylan unit.

Refer to the product lot number Certificate of Analysis for lot specific properties.

### PROPERTIES:

**Physical Description:** Off-white, odourless powder

### STORAGE CONDITIONS:

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

### METHOD OF DISSOLUTION (for 1.0% w/v solution)

This arabinoxyylan is the insoluble “pentosan” fraction from wheat flour. It has been purified to remove starch,  $\beta$ -glucan and protein. The product contains cellulose (measured as glucose by g.l.c. and possibly glucomannan and arabinogalactan. The material is insoluble in water, but can be solubilised as follows:

Add 1 gram of insoluble arabinoxyylan to 90 mL of distilled water at room temperature and stir vigorously on a magnetic stirrer for 5 min to remove all lumps. Add 10 mL of 1 M sodium hydroxide solution and stir for 10 min at room temperature. Neutralise the solution by the addition of 5 M acetic acid, and adjust the pH to 4.5 with 1 M HCl or 1 M sodium hydroxide. Adjust the volume to 100 mL with distilled water.

The solution is a light yellow/orange colour, and may be very slightly opalescent due to the presence of protein.

Arabinoxyylan solutions can be stored at room temperature for several weeks in a well-sealed storage bottle. Microbial contamination is prevented by adding two drops of toluene to the storage bottle.