

CM-PACHYMAN (Lot IIII0I)

P-CMPAC 10/15

CAS NO. 69552-83-6

PREPARATION:

Carboxymethyl pachyman (CM-Pachyman) is prepared by carboxymethylation of highly purified pachyman with chloroacetic acid. Pachyman is a polymer of $1,3-\beta$ -linked D-glucosyl residues.

PROPERTIES OF CM-PACHYMAN:

Degree of carboxymethylation (DS): ~ 0.2 .

Colour: tan coloured powder.

Solubility: Forms a colloidal suspension in water at 0.5 % w/v.

Enzyme susceptibility: Readily hydrolysed by endo-1,3-β-glucanase.

DISSOLUTION:

Gradually add 0.5 g of CM-pachyman to 90 mL of vigorously stirring water at 90°C. Continue stirring for approx. I h (until the polysaccharide is completely dispersed). Cool the solution to room temperature and add 5 mL of sodium acetate buffer (2 M, pH 5.0). Adjust the volume to 100 mL and store the solution in a well sealed glass container at 4°C. Prevent microbial infection by adding a few drops of toluene to the storage bottle.

For some 1,3- β -glucanases, a higher pH is require for activity; in these cases, substitute an appropriate buffer for the acetate buffer (eg. MOPS)