



## CM-PACHYMAN (Lot 180303a)

**P-CMPAC**  
**CAS: 69552-83-6**

**05/18**

### **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:**

<b>Degree of carboxymethylation (DS):</b>	~ 0.3.
<b>Colour:</b>	tan coloured powder.
<b>Solubility:</b>	Forms a colloidal suspension in water at 0.5% w/v.
<b>Enzyme susceptibility:</b>	Readily hydrolysed by endo-1,3- $\beta$ -glucanase.

### **DISSOLUTION:**

Gradually add 0.5 g of CM-pachyman to 90 mL of vigorously stirring water at 90°C. Continue stirring for approx. 1 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- $\beta$ -glucanases, a higher pH is require for activity; in these cases, substitute an appropriate buffer for the acetate buffer (eg. MOPS).