



CM-CURDLAN (Lot 160501a)

P-CMCUR
CAS: 114732-86-4

05/16

PREPARATION:

Carboxymethyl curdlan (CM-Curdlan) is prepared by carboxymethylation of highly purified curdlan with chloroacetic acid. Curdlan is a polymer of 1,3- β -linked D-glucosyl residues.

PROPERTIES OF CM-CURDLAN:

Degree of carboxymethylation (DS): ~ 0.4.

Viscosity: ~ 6 dL/g (Ubbelohde suspended viscometer, 25°C, in 0.5 M KCl).

Molecular Weight: 1,650 KD

Colour: light tan coloured powder.

Solubility: Forms a highly viscous aqueous solution in water or buffer at 0.2% w/v.

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

DISSOLUTION:

To 90 mL of vigorously stirring water at 90°C gradually add 0.2 gram of CM-curdlan. Continue stirring for approx. 30 min (until the polysaccharide is completely dissolved). 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. To prevent microbial infection, a few drops of toluene are added 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).

The solution will form a clear gel over time. Redissolve this by heating in a microwave oven to ~ 90°C