

CleriGel™ Super

Plant Culture Tested

Product Code: PCT0906

Gellan gum

CAS No: 71010 - 52 -1

Synonym : Gellan gum

Product Description :

Gelling agents play a key role in solidification of media in plant tissue culture. Choice of gelling agent can influence growth of the tissue in media.

CleriGel™, an agar substitute is a purified, natural anionic heteropolysaccharide produced from a bacterial substrate composed of glucuronic acid, rhamnose and glucose. It produces a clear, colorless gel with high strength which aids in visual detection of rooting pattern in the plants.

CleriGel™ produces agar like gels at approximately half the use required quantity of agar, in the presence of soluble salts. Unlike agar, gel strength of CleriGel™ is not affected over a wide range of pH and is free of phenolic contaminants. It is chemically inert to most of the biological growth additives. Moreover, microbial contamination is easily detected with CleriGel™ at an early stage as compared to agar.

Note:

- CleriGel™ Super is recommended for the commercial applications as it is cost effective and yields excellent results.
- Forms a firm transparent gel at a concentration of 1.8 - 2.5g/l depending on the type of plant species.

Directions :

- For Plant tissue culture applications, CleriGel™ can be used only in a medium containing divalent cations like Ca^{2+} and Mg^{2+} as cations are essential in formation of gel matrix.
- CleriGel™ should be added, after adjusting pH of the medium.
- In case of media with low cation formulations or hyperhydricity state, additional salts should be added or higher concentration of CleriGel™ should be used to overcome excess availability of water and attain proper gelation.

- CleriGel™ Super should be added slowly with constant stirring to the luke warm medium, to avoid lump formation prior to autoclaving.

Quality Control:

Appearance

White to off-white colored, homogeneous, free flowing powder.

Solubility

Clear to slightly hazy solution at 0.2 g in 100 ml water on boiling.

Clarity

Transparent gel is formed on cooling.

Transmittance

≥ 80 %

Loss on drying

≤ 15.0%

Gelling strength

400 - 700 gm/cm²

Particle size (36 mesh)

≥ 95%

Plant Tissue Culture Test

Passes

Storage and Shelf Life:

- Store below 30°C
- Use before expiry date as given on product label.

Revision : 01 / 2018