

# 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.

CleriGar S™, is a blend of Agar and CleriGel. It produces combine effects of both and results in a clear, colorless gel with high strength which aids in visual detection of rooting pattern in the plants at 3 to 4 g/l concentration.

CleriGar S™ produces agar like gels at approximately less than half the use required quantity of agar, in the presence of soluble salts. It is chemically inert to most of the biological growth additives. Moreover, microbial contamination is easily detected with CleriGar S™ at an early stage as compared to agar.

### Note:

- CleriGar S™ is recommended for the commercial applications as it is cost effective and yields excellent results.
- Forms a firm transparent gel at a concentration of 3 - 4g/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  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  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/l in 100 ml water on boiling.

#### Clarity

Transparent gel is formed on cooling.

#### Transmittance

$\geq 75\%$

#### Loss on drying

$\leq 15.0\%$

#### Gelling strength

400 - 700 gm/cm<sup>2</sup>

#### Plant Tissue Culture Test

Passes

### Storage and Shelf Life:

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

Revision : 01 / 2017