



Product Information Sheet

Gellan Gum:

Recommended Preparation Instructions

Product No. G434

These recommended preparation instructions are provided to facilitate the proper use of Gellan Gum powder and allow the end user to produce the clearest possible gel with this product. Two preparation methods, based on in-house testing, are presented below. Both methods should produce a gel with good clarity and gel strength.

- **If medium containing Gellan Gum (G434) is to be dispensed after medium sterilization:**
 - 1) Prepare medium by adding all components *before* the addition of Gellan Gum powder.
 - 2) Slowly add the Gellan Gum powder to the medium while stirring the medium. The medium may appear as a translucent suspension. This is normal and will not affect the gelling ability of the medium post-autoclaving.
 - 3) Once the Gellan Gum is fully suspended, sterilize the medium at 15 psi and 121°C for the appropriate amount of time depending on vessel volume. NOTE: The medium must attain 121°C for at least 15 – 20 minutes. The Gellan Gum will not completely melt if the medium does not reach 121°C for at least 15 minutes.
 - 4) After sterilization, swirl the container to ensure complete distribution of the melted Gellan Gum into the medium. Allow the medium to cool enough to be handled and dispense into pre-sterilized culture vessels. Gentle agitation of the medium during pouring is recommended, if possible.
 - 5) Allow the medium to fully solidify in the culture vessels before using.
- **If medium containing Gellan Gum (G434) is to be dispensed prior to medium sterilization:**
 - 1) Prepare medium by adding all components *before* the addition of Gellan Gum powder.
 - 2) Slowly add the Gellan Gum powder to the medium while stirring the medium.
 - 3) Once the Gellan Gum powder is fully suspended, heat the medium to a boil with stirring. The medium may turn a milky-white color; the Gellan Gum will not melt in boiling medium. This is normal and will not affect the gelling ability of the medium post-autoclaving.
 - 4) After the medium has reached a boil, turn off the heat source and continue stirring. Dispense the medium into culture vessels and sterilize at 15 psi and 121°C for the appropriate amount of time depending on culture vessel volume. NOTE: The medium must attain 121°C for at least 15 – 20 minutes. The Gellan Gum will not completely melt if the medium does not reach 121°C for at least 15 minutes.
 - 5) After sterilization, swirl the containers to ensure complete distribution of the melted Gellan Gum into the medium.
 - 6) Allow the medium to fully solidify in each culture vessel before using.

For technical support concerning the use of Gellan Gum (G434) in tissue culture applications contact PhytoTechnology Laboratories® Technical Services at tech@phytotechlab.com.

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