

PolySeed[®]

Technical Report

Dilution Water Preparation

Attention BOD Testers:

Do not underestimate the importance of properly prepared dilution water!

The bacteria in PolySeed must do two things in order to be effective in the BODs test: First they must sporulate and then they must reproduce. For either of these two processes to occur, it is imperative that the bacteria be in a favorable environment in which they can thrive. Re-hydrating PolySeed in properly prepared dilution water provides this favorable environment.

Set yourself (and your bacteria) up for success by always making sure the temperature, pH and conductivity of the dilution water are within range. If you are experiencing problems with the dilution water, consider such things as source water quality, DO concentration of the source water prior to adding nutrients, dilution water storage container cleaning practices and the length of time dilution water is stored prior to use. If the dilution water is not up to par, the bacteria in PolySeed will not be able to reproduce enough to get the job done.

Specified Ranges for Dilution water:

- **DO concentration of at least 7.5mg/L**
- **Temperature 20° ± 3°C**
- **pH 6.5 – 7.5**
- **Conductivity:**
 - Prior to addition of nutrient buffers: Less than 1 mho/SI
 - After addition of nutrient buffers: 125 – 165 mho/SI

Additional Notes:

- Unbuffered source water may be stored as long as blanks meet control criteria
- Storing source water prior to adding nutrient buffers may improve dilution water quality
- It is not recommended to store source water once nutrients have been added; storing buffered water may cause nitrifying bacteria to develop which may interfere with test results