

➤ **Test Ranges / Requirements:**

Water:

Deionized / Distilled water:

pH	5-6
Conductivity	<1micromho

BOD Water:

pH	6.8 - 7.2
Conductivity	125-165 micromhos

BOD Test:

Blanks	<.2 mg/L
Seed Corrections (SCF)	0.6 -1.0 mg/L
Standard (GGA)	168-228 mg/L

BOD ☑ Checklist

➤ **Equipment:**

DO Meter:

- Meter turned on at least 30 min prior to use
- Membrane good
- Calibrated according to manufacturers instructions
- Clean probe with Deionized water before use

BOD Bottles:

- Cleaned with a lab grade soap
- Triple rinsed with Deionized water
- Acid wash using 10% HCl solution

Tubing / Air Stones:

- Check for signs of mold in tubing
- Replace tubing at least once a month
- Replace air stones at least once a week
- Rinse tubing with Deionized water after every use
- Allow tubing to dry thoroughly before storing it

➤ **Dilution Water:**

- Only use Deionized or Distilled water for your test
- Store source water no more than 24 hrs in advance
- Keep source water at 20° ± 1°C
- Saturate source water before use
- Add nutrients immediately before use

➤ **Nutrients:**

If you make your own nutrients:

- Discard nutrients if there is any sign of precipitation or biological growth in the stock bottles
- Store nutrients at room temperature

Commercial nutrients:

- Use within the expiration date
- Store according to manufacturers instructions

➤ **PolySeed:**

- 500 mls of BOD water per Capsule (may be adjusted to achieve required results)
- Aerate and stir for 1 hour
- Let the solution settle 15 minutes
- Decant solution into a clean beaker (pour all but 20mls into a clean beaker) to eliminate the bran
- Place solution back on stir plate and gently stir throughout the test
- Use at least 4 dilutions for your seed control (15ml, 20ml, 25ml, 30ml)
- Use 4 ml of PolySeed in your GGA's and Samples
- Use solution within 6 hours

➤ **Glucose-Glutamic Acid:**

If you make your own GGA:

- Use only reagent-grade glucose and reagent-grade glutamic acid
- Dry at 103°C for 1 hour
- Add 150 mg glucose and 150 mg glutamic acid to distilled water and dilute to 1L
- Prepare fresh immediately before use

If you use commercial GGA:

- Check expiration date
- Check manufacturers instructions for proper use