

Protocol for Sanitizing Spools

1. Gather supplies:

- ☐ Tank for soaking
- ☐ Cut, unwound seed spools
- ☐ Sodium hypochlorite (or bleach without any added chemicals)
- ☐ Aquarium pump
- ☐ Freshwater
- ☐ Spool storage bin
- ☐ Paper towels

2. If your spools were just cut, dip them in a water bath to rinse off the PVC particle dust.

- Try to avoid washing the PVC sawdust down the drain. You can filter it out of the bath with cheesecloth or a small aquarium net.

3. Scrub your spools and rinse them with freshwater.

- Make sure you scrub all parts of the spool including the inside, top and bottom rims, and the edges of the v-notch.

4. Place a washer or similar spacer in the top and bottom of the slit on each spool to hold it open during bleaching.

- The washers ensure that the bleach touches every part of your spool. Bleach is only effective through contact.

5. Prepare a tank and a small aquarium pump for soaking your spools.

- Clean the tank and pump of any dust or other particles.
- Circulate water in the tank with the small aquarium pump during the entire sanitizing process.

6. Fill the tank with enough freshwater to cover your spools.

7. Add bleach to your tank to exceed 500 ppm and let the bleach circulate.

- Use 10 mL of household bleach per 1 L of water, or 3 tablespoons per 1 gallon.
- Check the concentration using [chlorine test strips](#).

8. Add your spools to the water and let them soak for at least 20 hours.

9. Add sodium thiosulfate to neutralize the bleach in the water in your tank.

- Approximately 1–2 grams of sodium thiosulfate will be required to neutralize 1 gallon of a 500 ppm chlorine solution.
- Always use a test strip to check that the chlorine is neutralized after you add and stir in the sodium thiosulfate.

10. Let the spools soak in the neutralized water for at least 1 hour.

11. Remove the spools from the tank and leave them in a clean space to dry.

- Place the spools on a clean surface in an area away from contamination sources, including running seawater.
- Dust and contaminants in the air can stick to the wet spools and cause contamination issues in your nursery later on.

12. Once the spools have dried, store them in an airtight cabinet or bin that has been wiped down with ethanol.

- Line the cabinet or container with clean paper towels to make sure the spools do not come in direct contact with the bottom or walls.

13. Keep the spools in a dry place until winding.

- Use silica beads as a desiccant, if necessary, to keep the storage space dry.