



DIY WATER TREATMENTS

HOMEMADE MELAFIX (a.k.a. “MelaFake”)

1/4 teaspoon Tea Tree Oil (*Melaluca cajuputi* or “Cajuput Oil”)
8 Tablespoons distilled water

SHAKE WELL BEFORE USING and dose at a rate of 5mL to 10 gallons

Notes: *Technically, the oil used in MelaFix is from the Cajuputi tree, a type of Tea Tree. Research has shown that using oil from other Tea Trees in the family will work just as well, it is unknown scientifically why any would be better than the others. Melaluca alternifolia is the most commonly found Tea Tree oil.*

PLASTER BUFFER BLOCKS

1 part Baking Soda (Sodium bicarbonate)
3 parts Calcium Sulfate (Gypsum)
(*this mixture is silica and phosphate free*)

–or–
DAP brand Plaster of Paris mix
(*DAP is phosphate free*)

–and (optionally)–
non-greasy fish food (flake, pellets or wafers- anything without added appetite stimulants)

Mix dry ingredients using distilled or RO water to make a medium paste (follow directions on box if using DAP). Make sure all lumps are gone in the mix. At this point you can add fish food and gently stir into the paste. Pour into ice cube trays and tap tray to release air bubbles. Let sit until dry in a non-humid location (usually a couple of days). Once dry, place cubes in ziplock bags and freeze (if food was added). Each cube lasts about 2 weeks. Buffering depends on source water.

Benefits: *Raises hardness of water for shrimp and adds calcium. Adding fish food creates a constant source of food.*

ALDER CONES

1 cone per 10 gallons for general use or conditioning for breeding (can use up to 3 per 10 gal.)

*Also can make separately as a tea and dose as an additive.

Benefits: *Adds beneficial tannins, helps create optimal breeding conditions for Amazonia/Asian species, can soften water and lower pH (depending on source water). Be cautious when using with small bottom-dwelling species or fry as they may get stuck in the crevices of the cones. Best to use in filter or in a mesh bag.*

ALMOND LEAVES

1 leaf per 10 gallons for general use or conditioning for breeding (can use up to 3 per 10 gal.)

Benefits: *Adds beneficial tannins, helps create optimal breeding conditions for Amazonia/Asian species, can soften water and lower pH (depending on source water). Great for use with Apistos and plecos as the leaves replicate their natural environment. Apistos are known leaf-spawners, and plecos enjoy rasping on the leaves. As the leaves break down they produce paramecium and infusoria which are great first foods for fry.*

PEAT MOSS

Usage will vary greatly depending on source water. Best dosing can be determined by using a separate bucket to test how much peat is needed to get pH where you want it. Use compressed pellets for easiest maintenance or bulk moss. Can be used as a layer in substrate but will become messy as it breaks apart. Best to use in a mesh bag in filter.

Benefits: *Adds beneficial tannins, helps create optimal breeding conditions for Amazonia/Asian species, can soften water and lower pH (depending on source water)*



DIY POWERHEAD BASED AUTO-DOSER



WHY USE IT?

- Avoid hassle of daily dosing
- Consistent
- Precise, daily doses
- Great for traveling

MATERIALS NEEDED

- Container (taller is better)
- Mini-jet 404/606, or equivalent
- Digital wall Timer (minute based)
- Syringe/pipette, or other connector
- Airline tubing & Check valve

STEP 1: CALCULATE # OF DAYS

Fill container with water

Place in final location

Run in 1 minute intervals, count.

Each minute = 1 day

STEP 2: CALCULATE FERTILIZERS

Add all fertilizers you would dose manually over same time period.

Fill the rest with distilled water.

Observe and adjust.

TIPS

- Do not mix micro with macro-nutrients.
- Add Excel or Acid Buffer to avoid mold.
- Keep in dark.
- Refill at water change.

FERTILIZER BASELINES (PER WEEK)

	29G	40G/50G/55G	75G
KNO ₃ (dry)	1/8 tsp	1/4 tsp	1/3 tsp
KH ₂ PO ₄ (dry)	1/24 tsp	1/16 tsp	1/8 tsp
Flourish (liquid)	10ml	15ml	20ml
Flourish Iron (liquid)	10ml	15ml	20ml

Tip: Proportions are more important than exact quantities. Dose approximately 3X as much KNO₃ as KH₂PO₄.