

Navigating the 5-Gallon Fish Tank in Litres: A Comprehensive Guide for Aquarists

When starting an aquarium hobby, one of the most common questions beginners deal with focuses on measurements. Particularly, aquarium sizes are often pointed out in gallons, especially in North American material. Nevertheless, for those utilizing the metric system, picturing these measurements can in some cases be confusing.

If you are looking at a compact starter aquarium, you have most likely experienced the popular **5-gallon aquarium**. But what does that equate to in the metric system?

In other words, a standard **5 United States gallon aquarium is approximately 18.92 litres**.

This detailed guide will explore the specific metric conversions, what a tank of this size means for your water pets, how to set it up, and whether it is the right option for your area.

1. The Numbers: Converting Gallons to Litres

Before diving into stocking levels and devices, it is essential to comprehend the exact math. Depending upon whether you are referencing US gallons or Imperial gallons (used historically in the UK **rectangular fish tank volume calculator** and Canada), the metric conversion varies slightly.

Gallon Type US/Imperial Value Specific Conversion in Litres Rounded for Everyday Use **US Gallons** 5 United States Gal 18.9271 Litres **18.9 Litres Imperial Gallons** 5 Imp Gal 22.7305 Litres **22.7 Litres**

Note: In the aquarium pastime, "gallons" often refers to United States gallons unless stated otherwise.

Comprehending that your 5-gallon tank holds approximately 19 litres of water is important. Water weighs around 1 kilogram per litre. This suggests a completely filled 18.9-litre tank-- once you element in substrate, decorations, and devices-- will weigh around **20 to 22 kgs (44 to 48 lbs)**. You need to ensure your furniture can comfortably support this weight.

2. Is a 19-Litre Tank Right for You?

A 19-litre (5-gallon) tank falls into the classification of a **nano aquarium**. These compact ecosystems have actually ended up being tremendously popular due to their little footprint, making them perfect for workplace desks, dormitory spaces, or small houses.

Nevertheless, before acquiring, it is vital to understand the physics of small fish tanks.

The Myth of "Easy Maintenance"

Beginners often assume that smaller sized tanks are much easier to preserve due to the fact that there is less water to clean. In reality, **the reverse is frequently real**.

- In a 19-litre body of water, chemical changes happen much faster than in a 100-litre tank.
- If a fish overindulges or a plant decomposes, the ammonia and nitrate levels can surge precariously in a matter of hours.

- Water specifications (temperature level and pH) change more rapidly.

For that reason, running a successful 19-litre aquarium requires diligence, stable routines, and a reputable water screening set.

3. What Can Live in a 18.9-Litre Aquarium?

Because of the restricted volume, equipping a 19-litre tank needs cautious planning. You can not keep large fish, nor can you keep education fish that require long swimming areas.

Here is what **can** easily reside in a 5-gallon/ 19-litre tank:

- **A Single Betta Fish (Siamese Fighting Fish):** A 19-litre tank is commonly considered the *gold standard* minimum size for a single male or female Betta. It offers them enough room to explore, specifically if planted largely.
- **Freshwater Shrimp:** Cherry shrimp, Amano shrimp, and crystal shrimp thrive in nano tanks. You can conveniently keep a colony of 10 to 15 shrimp in 19 litres, as their bioload (waste production) is extremely low.
- **Nerite or Mystery Snails:** Snails make fantastic clean-up crews. A single nerite snail will assist keep algae under control.
- **Nano Fish Species:** Very few fish types appropriate for a tank this size. Endler's livebearers (males only, to avoid overbreeding) or *Microdevario kubotai* (emerald dwarf rasbora) *can* work, but just if the aquarist is skilled and keeps rigorous water quality.

What NOT to Put in a 19-Litre Tank

To ensure animal well-being, prevent keeping the following species in a 5-gallon aquarium:



- **Goldfish:** Goldfish produce enormous amounts of waste and grow far too big. They need a minimum of 75+ litres for a single expensive goldfish.
- **Tetras, Danios, or Barbs:** These are education fish. To be happy, they need to be kept in groups of six or more and need horizontal swimming area (at least a 38-litre/ 10-gallon tank).
- **Plecostomus (Plecos):** Even the smaller types (like the Bristlenose Pleco) grow out of a 19-litre tank quickly.

4. Vital Equipment for a 19-Litre Tank

Setting up an 18.9-litre aquarium needs specific gear reduced to nano percentages.

- **Purification:** You will need a small, adjustable hang-on-back (HOB) filter or a sponge filter rated for as much as 20 or 30 litres. Make sure the flow rate isn't too strong, as fish like Bettas resist heavy currents.
- **Heating system:** Most exotic fish need a steady temperature level between 24 ° C and 26 ° C (75 ° F-- 78 ° F). A little 25-watt submersible heater is generally enough for a 19-litre volume.
- **Lighting:** Simple LED lights are ideal. If you wish to grow live plants (like Anubias, Java Fern, or Bucephalandra), ensure the light has a spectrum fit for plant development.
- **Thermometer:** Crucial for keeping track of water stability in a small volume.

5. Step-by-Step: Setting Up Your 19-Litre Aquarium

If you are all set to bring your 5-gallon tank to life, follow this fundamental setup outline:

1. **Rinse and Position:** Place your tank on a strong, level surface area away from direct sunlight (to avoid algae blooms). Wash the glass with warm water-- never use soap or chemicals.

- 2. **Include Substrate:** Add 2 to 4 kgs of aquarium gravel or nutrient-rich aqua-soil, sloping it slightly towards the back for visual depth.
- 3. **Install Hardscape & Plants:** Arrange driftwood, rocks, and live or silk plants. Live plants assist soak up nitrates and stabilize the water chemistry.
- 4. **Fill with Water:** Gently put your 18.9 litres of water into the tank. Using a plate or a plastic bag at the bottom assists avoid disturbing your substrate design.
- 5. **Add Water Conditioner:** Treat the tap water with a dechlorinator to get rid of damaging chlorine and chloramines.
- 6. **Set up Equipment:** Set up your filter and heater, then plug them in.
- 7. **The Nitrogen Cycle: Crucial Step.** Allow the tank to cycle for 2 to 4 weeks *before* adding any fish. This develops beneficial bacteria that convert toxic ammonia into safe nitrates.

Summary Table: 5-Gallon Tank at a Glance

Specification Metric Value (Litres/ cm/ kg) Imperial Value (Gallons/ inches/ lbs) **Water Capacity** ~ 18.9 Litres 5 United States Gallons **Overall Weight (Full)** ~ 20-- 22 kg ~ 44-- 48 pounds **Common Dimensions (Standard)** ~ 40 x 20 x 25 cm ~ 16 x 8 x 10 inches **Suitable Stocking Limit** 1 Betta OR 10-- 15 Shrimp 1 Betta OR 10-- 15 Shrimp **Minimum Heater Size** 25 Watts 25 Watts

Understanding that a 5-gallon aquarium equates to **18.9 litres** is the initial step toward constructing a thriving aquatic environment. While compact and ideal for tight spaces, a 19-litre tank demands regard, patience, and regular maintenance. By equipping it responsibly-- possibly with a majestic Betta fish or a colony of colorful freshwater shrimp-- you can develop a spectacular, lively piece of nature right on your desktop.