

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

When starting an aquarium pastime, one of the most typical questions novices face revolves around measurements. Particularly, aquarium sizes are often mentioned in gallons, especially in North American material. However, for those using the metric system, envisioning these dimensions can sometimes be puzzling.

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

In short, a basic **5 United States gallon aquarium is around 18.92 litres**.

This extensive guide will explore the precise metric conversions, what a tank of this size indicates for your marine animals, how to set it up, and whether it is the right option for your space.

1. The Numbers: Converting Gallons to Litres

Before diving into equipping levels and devices, it is essential to comprehend the exact mathematics. Depending on whether you are referencing United States gallons or Imperial gallons (used historically in the UK and Canada), the metric conversion varies slightly.

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

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

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

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

A 19-litre (5-gallon) tank falls into the category of a **nano aquarium**. These compact communities have become exceptionally popular due to their small footprint, making them ideal for office desks, dormitory, or studio apartments.

However, before buying, it is vital to comprehend the physics of small fish tanks.

The Myth of "Easy Maintenance"

Beginners typically assume that smaller tanks are simpler to preserve because there is less water to clean. In truth, **the opposite is typically real**.

- In a 19-litre body of water, chemical changes occur much faster than in a 100-litre tank.
- If a fish overeats or a plant rots, the ammonia and nitrate levels can increase precariously in a matter of hours.
- Water parameters (temperature level and pH) vary more rapidly.

For that reason, running a successful 19-litre aquarium requires diligence, stable regimens, and a dependable water testing kit.

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

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

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 thought about the *gold standard* minimum size for a single male or female Betta. It gives them adequate room to check out, particularly if planted densely.
- **Freshwater Shrimp:** Cherry shrimp, Amano shrimp, and crystal shrimp prosper in nano tanks. You can easily keep a colony of 10 to 15 shrimp in 19 litres, as their bioload (waste production) is incredibly low.
- **Nerite or Mystery Snails:** Snails make great cleanup teams. A single nerite snail will help 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 experienced and preserves strenuous water quality.

What NOT to Put in a 19-Litre Tank

To ensure animal welfare, avoid keeping the following types in a 5-gallon aquarium:

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

4. Essential Equipment for a 19-Litre Tank

Setting up an 18.9-litre aquarium requires particular equipment reduced to nano proportions.

- **Purification:** You will need a small, adjustable hang-on-back (HOB) filter or a sponge filter ranked for up to 20 or 30 litres. Ensure the flow rate isn't too strong, as fish like Bettas struggle against heavy currents.
- **Heater:** Most exotic fish need a stable temperature between 24 ° C and 26 ° C (75 ° F-- 78 ° F). A little 25-watt submersible heating system is normally sufficient for a 19-litre volume.
- **Lighting:** Simple LED lights are ideal. If you wish to grow live plants (like Anubias, Java Fern, or Bucephalandra), guarantee the light has a spectrum matched 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 overview:

1. **Rinse and Position:** Place your tank on a strong, level surface area far from direct sunshine (to avoid algae flowers). Rinse the glass with warm water-- never utilize soap or chemicals.
2. **Add Substrate:** Add 2 to 4 kilograms of aquarium gravel or nutrient-rich aqua-soil, sloping it a little towards the back for visual depth.
3. **Install Hardscape & Plants:** Arrange driftwood, rocks, and live or silk plants. Live plants assist take in nitrates and stabilize the water chemistry.
4. **Fill with Water:** Gently put your 18.9 litres of water into the tank. Utilizing a plate or a plastic bag at the bottom assists avoid troubling your substrate layout.
5. **Add Water Conditioner:** Treat the tap water with a dechlorinator to get rid of hazardous chlorine and chloramines.
6. **Set up Equipment:** Set up your filter and heating unit, then plug them in.
7. **The Nitrogen Cycle: Crucial Step.** Permit the tank to cycle for 2 to 4 weeks *before* including any fish. This builds up helpful bacteria that transform hazardous ammonia into safe nitrates.

Summary Table: 5-Gallon Tank at a Glance

Criterion	Metric Value (Litres/ cm/ kg)	Imperial Value (Gallons/ inches/ lbs)	Water Capacity ~ 18.9 Litres 5 US Gallons
Total Weight (Full)	~ 20-- 22 kg	~ 44-- 48 lbs	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

Comprehending that a 5-gallon fish tank equates to **18.9 litres** is the initial step toward building a flourishing aquatic environment. While compact and ideal for tight spaces, a 19-litre tank demands regard, persistence, and regular upkeep. By equipping it properly-- perhaps with a marvelous Betta fish or a colony of vibrant [rectangular tank volume calculator](#) freshwater shrimp-- you can create a spectacular, dynamic piece of nature right on your desktop.

