

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

When beginning an aquarium [aquarium volume calculator](#) hobby, among the most common questions newbies deal with focuses on measurements. Specifically, aquarium sizes are frequently cited in gallons, especially in North American material. Nevertheless, for those utilizing the metric system, picturing these dimensions can in some cases be puzzling.

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

In other words, a basic **5 US gallon fish tank is roughly 18.92 litres**.

This extensive guide will check out the exact metric conversions, what a tank of this size implies for your water family pets, how to set it up, and whether it is the right choice for your area.

1. The Numbers: Converting Gallons to Litres

Before diving into stocking levels and devices, it is very important to understand the exact mathematics. Depending upon whether you are referencing US gallons or Imperial gallons (used historically in the UK and Canada), the metric conversion differs somewhat.

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

Keep in mind: In the aquarium pastime, "gallons" often describes US gallons unless mentioned otherwise.



Comprehending that your 5-gallon tank holds roughly 19 litres of water is crucial. Water weighs approximately 1 kilogram per litre. This indicates a completely filled 18.9-litre tank-- when you consider substrate, designs, and devices-- will weigh around **20 to 22 kilograms (44 to 48 lbs)**. You must 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 communities have become immensely popular due to their small footprint, making them perfect for office desks, dormitory spaces, or little houses.

However, before buying, it is essential to comprehend the physics of small aquariums.

The Myth of "Easy Maintenance"

Beginners frequently presume that smaller sized tanks are simpler to maintain since there is less water to clean. In reality, **the reverse is typically real**.

- In a 19-litre body of water, chemical modifications happen much faster than in a 100-litre tank.
- If a fish eats way too much or a plant decomposes, the ammonia and nitrate levels can surge dangerously in a matter of hours.
- Water specifications (temperature level and pH) fluctuate more quickly.

Therefore, running a successful 19-litre aquarium requires diligence, stable routines, and a trusted water testing set.

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

Due to the fact that of the restricted volume, equipping a 19-litre tank requires careful planning. You can not keep big fish, nor can you keep education fish that require long swimming areas.

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

- **A Single Betta Fish (Siamese Fighting Fish):** A 19-litre tank is extensively thought about the *gold standard* minimum size for a single male or female Betta. It provides them sufficient space to explore, 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 extremely low.
- **Nerite or Mystery Snails:** Snails make fantastic clean-up teams. A single nerite snail will help keep algae under control.
- **Nano Fish Species:** Very couple of fish types appropriate for a tank this size. Endler's livebearers (males only, to prevent overbreeding) or *Microdevario kubotai* (emerald dwarf rasbora) *can* work, however only if the aquarist is skilled and preserves extensive water quality.

What NOT to Put in a 19-Litre Tank

To make sure animal welfare, avoid keeping the following species in a 5-gallon aquarium:

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

4. Important Equipment for a 19-Litre Tank

Setting up an 18.9-litre aquarium requires specific equipment reduced to nano percentages.

- **Filtering:** You will need a small, adjustable hang-on-back (HOB) filter or a sponge filter rated for approximately 20 or 30 litres. Guarantee the circulation rate isn't too strong, as fish like Bettas struggle versus heavy currents.
- **Heater:** Most tropical fish require a stable 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 suited for plant growth.
- **Thermometer:** Crucial for monitoring water stability in a little 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 sunlight (to prevent algae flowers). Rinse the glass with warm water-- never ever utilize soap or chemicals.

- 2. **Add Substrate:** Add 2 to 4 kilograms 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 help take in nitrates and support the water chemistry.
- 4. **Fill with Water:** Gently pour your 18.9 litres of water into the tank. Utilizing a plate or a plastic bag at the bottom helps avoid disturbing your substrate design.
- 5. **Include Water Conditioner:** Treat the tap water with a dechlorinator to get rid of harmful chlorine and chloramines.
- 6. **Set up Equipment:** Set up your filter and heating system, then plug them in.
- 7. **The Nitrogen Cycle: Crucial Step.** Enable the tank to cycle for 2 to 4 weeks *before* including any fish. This develops up useful germs that convert 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
Overall Weight (Full)	~ 20-- 22 kg	~ 44-- 48 lbs	Typical Dimensions (Standard) ~ 40 x 20 x 25 cm ~ 16 x 8 x 10 inches
Ideal 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 fish tank translates to **18.9 litres** is the primary step towards constructing a thriving marine environment. While compact and perfect for tight areas, a 19-litre tank needs respect, patience, and regular maintenance. By equipping it properly-- possibly with a stunning Betta fish or a colony of vibrant freshwater shrimp-- you can produce a spectacular, vibrant piece of nature right on your desktop.