

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

When beginning an aquarium pastime, one of the most common questions novices deal with focuses on measurements. Particularly, aquarium sizes are regularly mentioned in gallons, particularly in North American content. However, for those utilizing the metric system, envisioning these dimensions can in some cases be puzzling.

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

In brief, a standard **5 US gallon fish tank is around 18.92 litres**.

This detailed guide will explore the precise metric conversions, what a tank of this size implies for your water family pets, how to set it up, and whether it is the best choice for your space.

1. The Numbers: Converting Gallons to Litres

Before diving into equipping levels and equipment, it is essential to understand the precise mathematics. Depending upon whether you are referencing US gallons or Imperial gallons (utilized historically in the UK and Canada), the metric conversion varies slightly.

Gallon Type US/Imperial Value Exact Conversion in Litres Rounded for Everyday Use **United States 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 hobby, "gallons" nearly constantly refers to US gallons unless stated otherwise.

Understanding that your 5-gallon tank holds approximately 19 litres of water is crucial. Water weighs approximately 1 kg per litre. This implies a totally filled 18.9-litre tank-- once you element in substrate, designs, and equipment-- will weigh around **20 to 22 kilograms (44 to 48 lbs)**. 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 ecosystems have ended up being tremendously popular due to their small footprint, making them perfect for workplace desks, dormitory, or studio apartments.

Nevertheless, before purchasing, it is important to understand the physics of small fish tanks.

The Myth of "Easy Maintenance"

Beginners frequently presume that smaller tanks are much easier to preserve because there is less water to tidy. In reality, **the opposite is typically true**.

- 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 surge alarmingly in a matter of hours.
- Water parameters (temperature and pH) fluctuate more quickly.

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

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

Due to the fact that of the minimal volume, stocking a [rectangular aquarium volume calculator](#) 19-litre tank needs careful planning. You can not keep large fish, nor can you keep education fish that need long swimming areas.

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

- **A Single Betta Fish (Siamese Fighting Fish):** A 19-litre tank is widely considered the *gold requirement* minimum size for a single male or female Betta. It gives them adequate space to check out, particularly if planted densely.
- **Freshwater Shrimp:** Cherry shrimp, Amano shrimp, and crystal shrimp prosper in nano tanks. You can conveniently keep a nest of 10 to 15 shrimp in 19 litres, as their bioload (waste production) is exceptionally low.
- **Nerite or Mystery Snails:** Snails make great clean-up crews. A single nerite snail will help keep algae under control.
- **Nano Fish Species:** Very few fish species appropriate for a tank this size. Endler's livebearers (males just, to prevent overbreeding) or *Microdevario kubotai* (emerald dwarf rasbora) *can* work, however just if the aquarist is experienced and maintains strenuous 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 huge amounts of waste and grow far too big. They require a minimum of 75+ litres for a single elegant goldfish.
- **Tetras, Danios, or Barbs:** These are schooling fish. To be delighted, they require 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 sized species (like the Bristlenose Pleco) grow out of a 19-litre tank rapidly.

4. Essential Equipment for a 19-Litre Tank

Establishing an 18.9-litre aquarium needs specific equipment scaled down to nano percentages.



- **Filtration:** You will need a small, adjustable hang-on-back (HOB) filter or a sponge filter ranked for approximately 20 or 30 litres. Make sure the circulation rate isn't too strong, as fish like Bettas struggle versus heavy currents.
- **Heating unit:** Most exotic fish need a steady temperature between 24 ° C and 26 ° C (75 ° F-- 78 ° F). A little 25-watt submersible heating system is typically sufficient for a 19-litre volume.
- **Lighting:** Simple LED lights are perfect. If you want to grow live plants (like Anubias, Java Fern, or Bucephalandra), guarantee the light has actually a spectrum fit for plant growth.
- **Thermometer:** Crucial for keeping track of water stability in a little volume.

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

If you are prepared to bring your 5-gallon tank to life, follow this standard setup overview:

1. **Rinse and Position:** Place your tank on a tough, level surface area away from direct sunlight (to prevent algae blossoms). Wash the glass with warm water-- never use soap or chemicals.
2. **Add Substrate:** Add 2 to 4 kgs of aquarium gravel or nutrient-rich aqua-soil, sloping it slightly toward 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. 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 harmful chlorine and chloramines.

- 6. **Install Equipment:** Set up your filter and heater, 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 useful bacteria that convert poisonous ammonia into safe nitrates.

Summary Table: 5-Gallon Tank at a Glance

Parameter	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
	Perfect 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 aquarium translates to **18.9 litres** is the initial step toward constructing a thriving aquatic environment. While compact and perfect for tight areas, a 19-litre tank needs regard, persistence, and routine upkeep. By equipping it responsibly-- perhaps with a stunning Betta fish or a nest of vibrant freshwater shrimp-- you can develop a stunning, dynamic piece of nature right on your desktop.