

Thermo Flask

Description

A **Thermo Flask** (500 ml – 1000 ml) is a **vacuum-insulated container** designed to maintain the temperature of liquids (hot or cold) over extended periods. These flasks are essential for **personal hydration, medical transportation, fieldwork, and veterinary/human health applications** where temperature preservation is critical.

Available in various capacities like **500 ml, 750 ml, and 1000 ml**, these flasks offer portability without compromising insulation performance.

Specification

- **Capacity Options:** 500 ml, 750 ml, 1000 ml
- **Temperature Retention:**
 - Hot liquids: Up to 12–24 hours
 - Cold liquids: Up to 24–36 hours
- **Insulation Type:** Double-wall vacuum insulation
- **Material (Interior):** Food-grade stainless steel (SS 304)
- **Material (Exterior):** Stainless steel or coated plastic shell (anti-sweat)
- **Lid Type:** Leak-proof, screw-on or one-touch open
- **Mouth:** Wide or narrow mouth options
- **Weight:** Approx. 300g–600g (varies with size)

Sizes & Shapes

- **500 ml:** Compact, ideal for personal use, small samples, or quick hydration
- **750 ml:** Mid-size for longer fieldwork or travel
- **1000 ml (1L):** Large volume for sharing, veterinary field kits, or longer shifts
- **Shapes Available:**
 - Slim cylindrical
 - Wide-bodied
 - Tumbler shape (modern flask-mug hybrids)

Types

- **Classic Stainless Steel Thermo Flask**
- **Thermo Flask with Handle or Strap**
- **Push-button or Flip-top Flask**
- **Built-in Cup Lid Flask (for field or hospital use)**
- **Customizable/Branded Thermo Flasks (with logos or text)**

Material

- **Inner Layer:** High-grade 304 stainless steel
- **Outer Layer:**
 - 201/304 stainless steel
 - BPA-free plastic coating (on some models)
- **Seals & Gasket:** Food-grade silicone (leak-proof and safe)

Category

- Medical Equipment Accessories
- Personal Care & Utility Items
- Field Medical Supplies
- Veterinary Field Tools

Product Form

- Cylindrical, ergonomic bottle
- Detachable, leak-proof lid
- Some include a tea filter or strainer

Usage

- **Personal hydration:** For hot tea, water, or cold beverages
- **Medical/veterinary field kits:** Transport temperature-sensitive fluids (glucose, saline, etc.)
- **Vaccine drives or first aid:** Carry warm fluids in low-resource settings
- **Hospital/nursing care:** Assist immobile patients with warm water

Advantages

- Maintains temperature for long hours
- Durable and rust-resistant
- Leak-proof and travel-friendly
- Easy to clean and refill
- Available in various stylish designs

Disadvantages

- Slightly heavier than plastic bottles
- Can dent if dropped (especially stainless steel models)
- May retain smell if not cleaned properly
- Not suitable for carbonated beverages

Precautions

- Do not use for carbonated or fermenting liquids
- Always close the lid tightly to prevent leaks
- Hand-wash preferred for maintaining vacuum seal
- Avoid microwaving or freezing
- Clean with warm water and mild detergent regularly

HS / HSN Code

- **HS Code:** 9617.00 (Vacuum flasks and other vacuum vessels)
- **HSN Code (India):** 9617.00.10 (Vacuum flasks up to 2L capacity)

Handling & Sterilization Details

- **Sterilization:** Not required, but flasks should be cleaned before first use
- **Handling Tips:**
 - Rinse with hot or cold water before filling for better retention
 - Keep lid gasket clean for airtight seal
 - Air-dry after washing to prevent odour buildup

Human and Veterinary Application

Veterinary Application

- Used by field vets to carry warm liquids during rural or mobile animal treatments
- Assists in hydration support, emergency glucose solution, or warm saline
- Ideal for vaccination camps or first aid in remote locations

Human Application

- Daily hydration for hospital staff, patients, caregivers
- Used in patient care for warm fluids (post-operative, paediatric, geriatric care)
- Helps travellers or emergency responders stay hydrated with safe-temperature fluids

FAQ's (Frequently Asked Questions)

Q1: How long does the Thermo Flask keep liquids hot or cold?

A1: Depending on the model, it can retain heat for 12–24 hours and cold for 24–36 hours.

Q2: Can it be used to carry medical liquids?

A2: Yes, it is safe for carrying fluids like warm saline or oral glucose solutions in medical or vet applications.

Q3: Is it safe for food and drinks?

A3: Yes, if made from food-grade stainless steel (SS 304), it's completely safe and BPA-free.

Q4: Can I clean it in a dishwasher?

A4: Some flasks are dishwasher-safe, but hand-washing is generally recommended to maintain vacuum seal integrity.

Q5: Are 500ml and 1000ml flasks airline-friendly?

A5: Yes, but check with the airline regarding carrying filled flasks through security (empty ones are usually allowed).