

# CROWN – FLEXITANKS

Flexitanks are flexible tank containers that offer secure storage and shipment of liquid cargo in bulk. To give a technical definition:



"A Flexitank can be described as a hermetically sealed, collapsible, and flexible bag or bladder, which is fitted into a twenty-foot Dry Van (DV) or standard container. The Flexitanks commonly used by the industry can hold up to 24,000 litres of liquid cargo. Flexitanks are used for the transportation of non-hazardous liquids."

The majority of flexitanks offer a capacity between 10,000 liters to 24,000 liters on average. Others are customized according to shipment requirements – ranging from 1,000 liters to 100,000 liters.

## What Is A Flexitank Made Up Of?

A Flexitank container is a bulk liquid storage tank. Made of numerous layers of polyethylene and a woven polypropylene outer covering.



Images used are for representative purpose only

They are manufactured using different types of materials such as:

- Multilayer polyethylene
- Single and double layer polyethylene
- Barrier tanks
- PVC
- Bottom discharge

## 5 Uses for a Flexitank

Due to its high efficiency and exceptional contamination prevention, flexitanks are used for non-hazardous chemical transportation. But also for food-grade goods like edible oil, fruit concentrates, drinks, among others.

### Fuel Storage

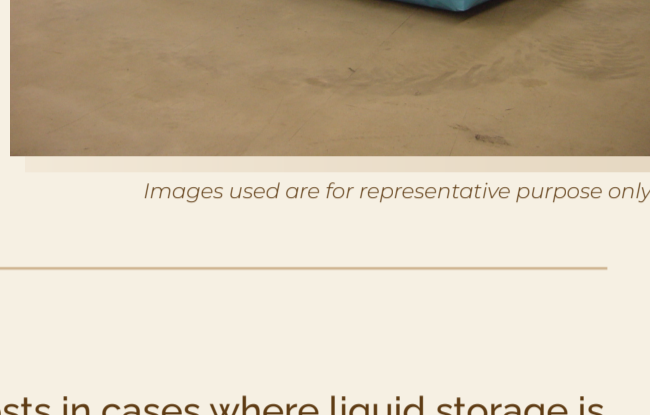
Liquid fuels including gasoline, diesel, and oil can be stored and transported in Flexitanks easily. They are primarily utilized for storage. Coupled with a protective lining and a berm, to provide extra containment safety to the surrounding environ-

### Portable Water Storage

Flexitanks occupy very little space and are easy to transport. In case of emergencies or during disaster reliefs, they are also used to store and transport potable water.

### Food - Grade Liquid Storage

Flexitanks enable the safe storage of food-grade liquid ingredients, such as milk, juices, wines, fructose syrup, and others.



Images used are for representative purpose only

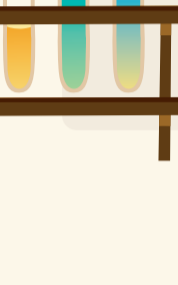
### Industrial Chemical Storage

Flexitank containers are ideal for transporting and storing industrial liquid chemicals. Such as liquid detergents, lubricants, fertilizers, liquid latex, and paints, among others.

### Single - Use & Primary Storage

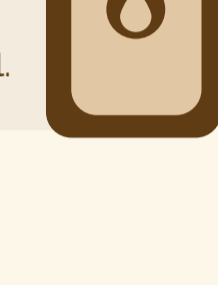
Flexitanks can decrease the overall storage costs in cases where liquid storage is not for a long duration.

## What can you carry in a Flexitank ?

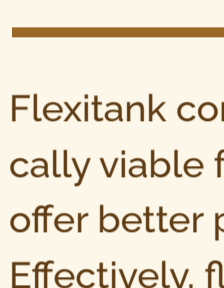


### Food - Grade Liquid

Milk, juices, wines, fructose syrup, and more

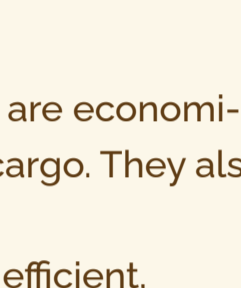


### Water



### Chemicals

Liquid detergents, fertilizers, and paints.



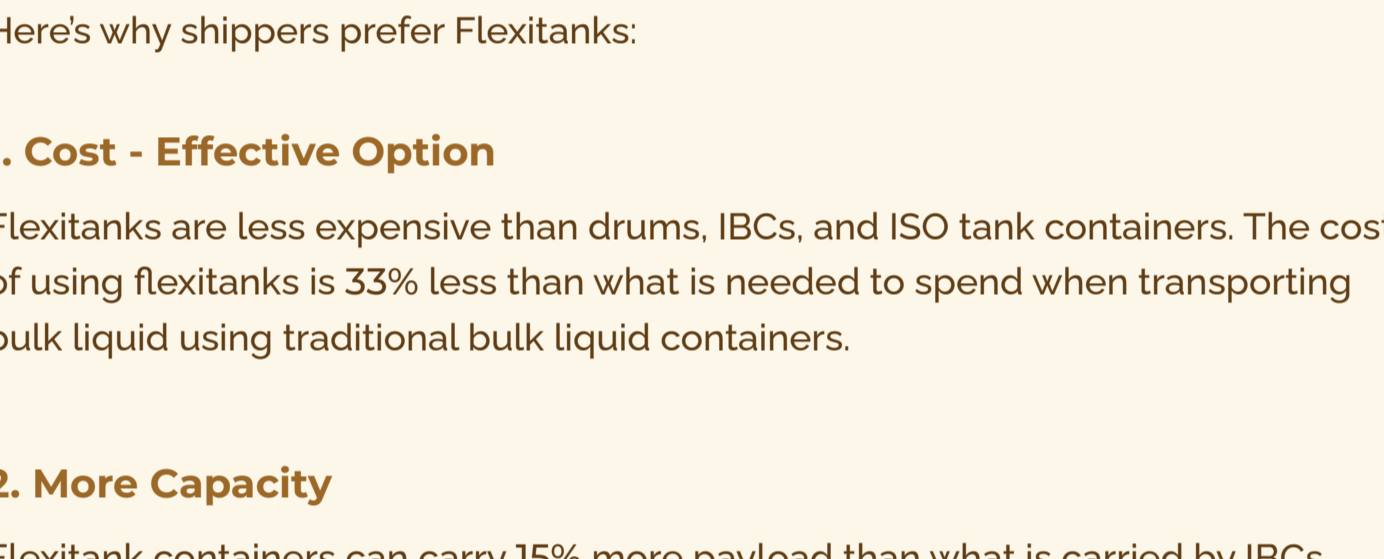
### Fuel

Diesel, petrol and oil.

## 5 Advantages to using a Flexitank

Flexitank containers have an increasingly growing demand as they are economically viable for bulk traders for transporting non-hazardous liquid cargo. They also offer better protection against liquid cargo contamination.

Effectively, flexitank storage tanks have made transportation more efficient, cost-effective, and also have a lesser environmental impact. They are becoming a preferred replacement for the traditionally used drums and ISO containers.



Images used are for representative purpose only

Here's why shippers prefer Flexitanks:

### 1. Cost - Effective Option

Flexitanks are less expensive than drums, IBCs, and ISO tank containers. The cost of using flexitanks is 33% less than what is needed to spend when transporting bulk liquid using traditional bulk liquid containers.

### 2. More Capacity

Flexitank containers can carry 15% more payload than what is carried by IBCs. 44% more than drums. And 50% more than bottles. So, they offer more capacity while being an economically viable option for shippers.

### 3. Preserves Product Quality

Flexitanks keep the quality of liquid carefully intact. They are composed of several layers of polyethylene, each fitted with a pump and a valve. Making it airproof, waterproof, and weatherproof. They are mostly designed for single-use which contributes to reducing the risk of contamination considerably.

### 4. Faster Loading & Unloading

Flexitank storage containers do not require a forklift to load or unload. This makes the entire loading and unloading process faster by up to 90%. It also makes Flexitanks a cheaper option as compared to the cost of using drums. As well as IBCs with a reduced product loss during the process.

### 5. Requires Less(er) Labor

As flexitanks are convenient to handle, load, and unload, the involvement of the labor is comparatively lesser. This makes the logistics revenue considerably lower.

## Recommended Flexitank Capacity by Liquid Type

The most widely available flexitank containers come between 10,000 liters and 24,000 liters. Flexitank models are available in 16,000L, 18,000L, 20,000L, 22,000L, and 24,000L.

Some companies also offer a range of 1,000L up to 100,000L — depending on the customer's requirements.

Here's a reference table for various types of liquids and corresponding flexitank capacity:

Type of product to be Transported	Density (kg/m )	Recommended Size of Flexitank
Latex	60 - 95	19,000 L
Polyol	1,100	19,000 L
Glycerin	1,260	20,000 L
Palm Oil	887.5	21,000 L
Olive Oil	905	22,000 L
Wine	985.7	24,000 L

## General Misconception For Choosing Flexitank Capacity

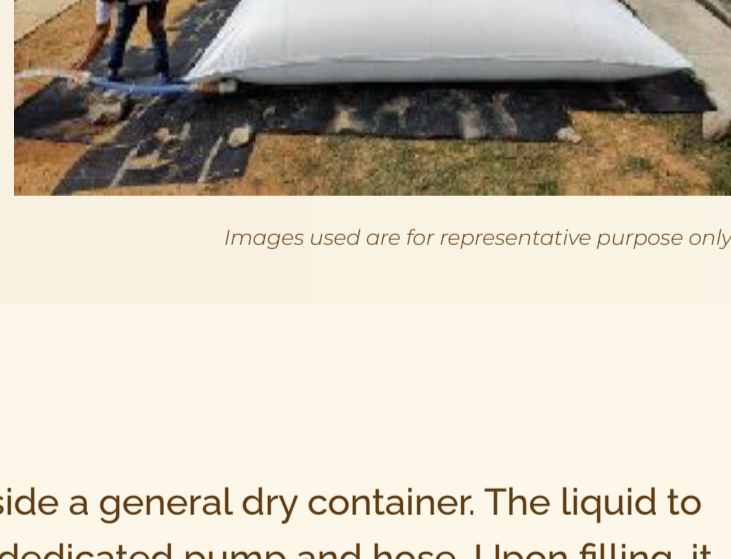
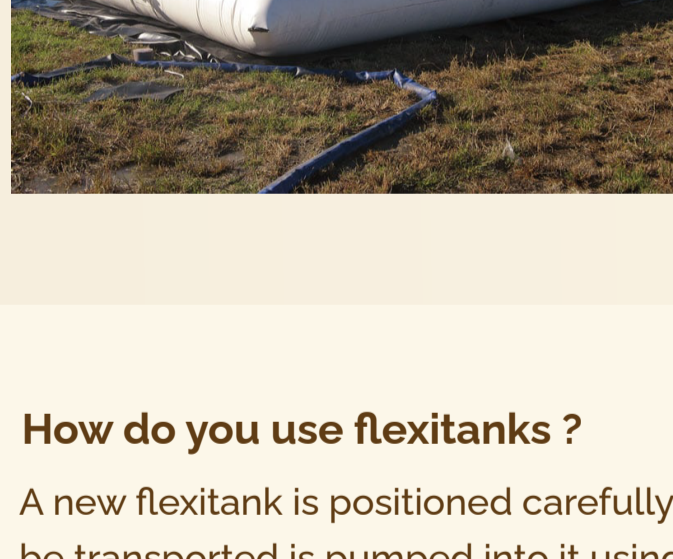
**Myth:** A flexitank with a greater capacity as compared to the total quantity of load would be a better choice for the bulk load of liquid.

**Fact:** It is the density/specific gravity of the liquid which plays a crucial role in determining the correct size of flexitank to be used.

## Get a Flexitank That First Your Needs on xChange

So, now you've had a chance to learn more about Flexitank. Maybe it's for you – or maybe you're looking for other tank containers?

Regardless of where you're at, finding your next container has never been easier.



Images used are for representative purpose only

## How do you use flexitanks ?

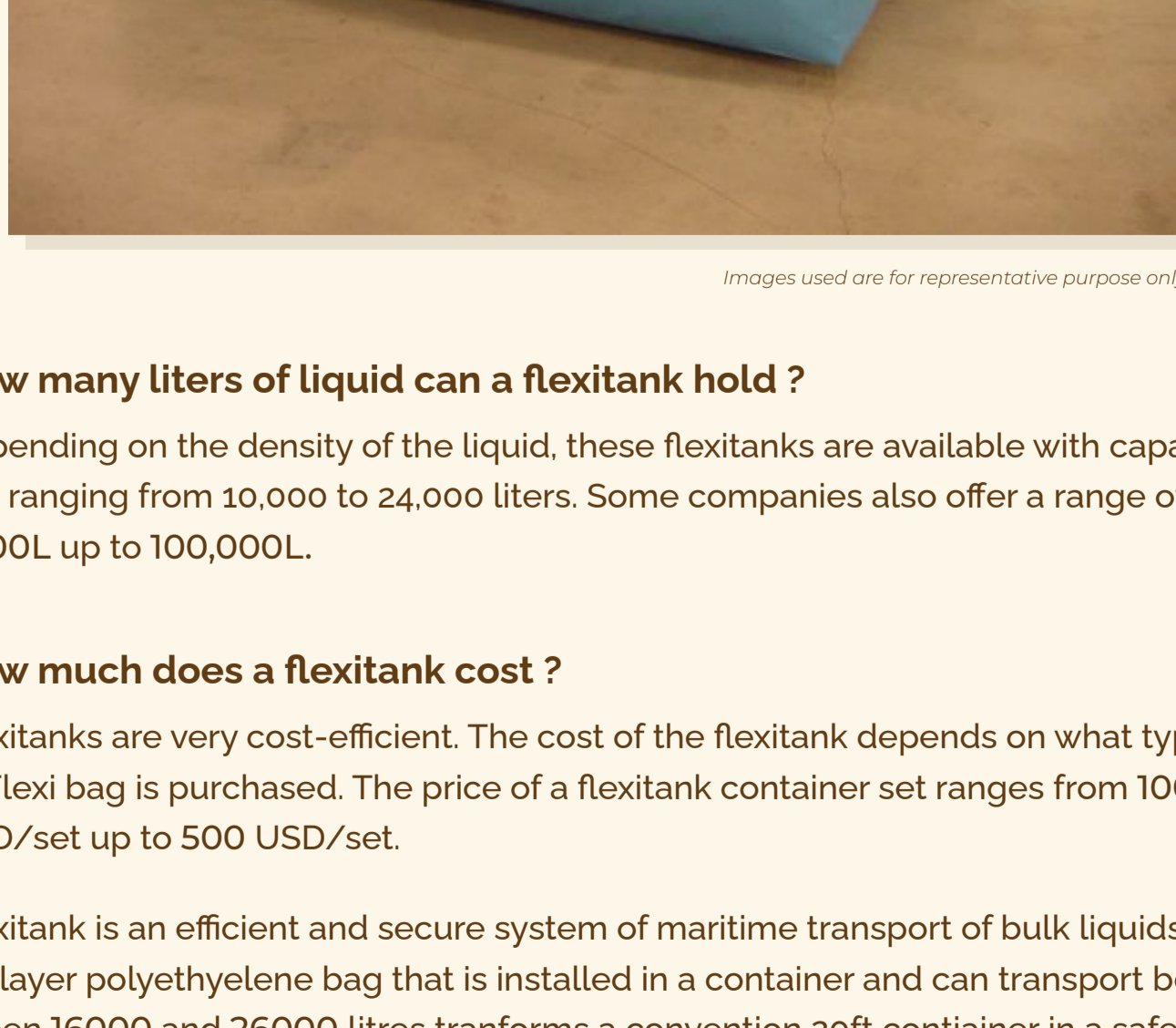
A new flexitank is positioned carefully inside a general dry container. The liquid to be transported is pumped into it using a dedicated pump and hose. Upon filling, it is sealed and a bulkhead or a sturdy frame is used to stop it from moving inside the container. .

## How do you unload a flexitank ?

The front end of the flexitank is lifted and rolled slowly towards the door so that the liquid residue can flow easily towards the product valve. The process is continued until the liquid inside the flexitank is pumped off completely.

## Are flexitanks reusable ?

While most flexitanks are made for temporary, one-time use, others can contain a liquid for years at a time, or be reused as well.



Images used are for representative purpose only

## How many liters of liquid can a flexitank hold ?

Depending on the density of the liquid, these flexitanks are available with capacities ranging from 10,000 to 24,000 liters. Some companies also offer a range of 1,000L up to 100,000L.

## How much does a flexitank cost ?

Flexitanks are very cost-efficient. The cost of the flexitank depends on what type of Flexi bag is purchased. The price of a flexitank container set ranges from 100 USD/set up to 500 USD/set.

Flexitank is an efficient and secure system of maritime transport of bulk liquids in a 7 layer polyethylene bag that is installed in a container and can transport between 16000 and 26000 litres transforms a convention 20ft container in a safe and efficient marine transportation of bulk liquids

## What liquids can be transported in a Flexitank ?

Drinking water, fruit juices and concentrates, wine, sweeteners, malt extracts, olive oils, all type of edible oils, paints, chemicals, bio diesel ... liquid detergents, lubricants, inks, and a lot of other free flowing liquid items.