# **FLEXITANK**

Flexible, light and collapsible packing of a new generation for transportation and storage of liquids:

- a) Transport Flexitanks single use.
- b) Storage Flexitanks multiuse, long term storage.



#### FLEXITANK FOR TRANSPORT AND STORAGE

# Food liquids

- Certified for contact with foodstuffs – suitable for transportation of food products.
- Aseptic Flexitank Hygienic sterilization – bacterias free packaging on request.
- The materials used are resistant to a broad variety of substances.

- ✓ Cider
- ✓ Wine
- √ Fruit juices
- ✓ Concentrates
- ✓ Mineral water
- ✓ Potable water
- √ Tomato juice
- ✓ Vegetable oils
- ✓ Molasses

- √ Palm oils
- √ Fish oils
- √ Food oils
- √ Glucose
- ✓ Sorbitol
- √ Fruit sugar
- √ Sweeteners
- ✓ Malt extract
- ✓ Fats
- ✓ Lard

#### MULTILAYER FLEXITANK FOR TRANSPORT AND STORAGE

- Non-dangerous liquids which are not listed in ADR, RID, IMDG transportation regulations.
- The materials used are resistant to a broad variety of nondangerous substances.
- Storage design permits multiple use for storage applications.

# **Technical liquids**

- ✓ Detergents
- ✓ Lubricating oils
- ✓ Lubricants
- ✓ Paraffine
- ✓ Waxes
- ✓ Inks
- ✓ Paints
- √ Emulsions
- √ Fertilizers
- ✓ Latex
- √ Softeners
- √ Non-dangerous chemicals
- √ Herbicides

#### MULTILAYER FLEXITANK FOR TRANSPORT AND STORAGE

#### **Technical data**

Standard volume: 17 - 24 m3 for transportation

up to 50 m3 for storage

• Width (24 m<sup>3</sup>): 3.93 m

Length (24 m³): 7.10 m

Average weight: 615 g/m²

Total thickness: about 0.900 mm

Elongation at 2000 N/5cm: 15%

OTR – standard liners
 500 cm³/m²/24h (at 23°C, 0% RH)

with EVOH barrier liner 1.5 cm<sup>3</sup>/m<sup>2</sup>/24h (at 23°C, 0% RH)

Water permeability: < 0.8 g/m²/24h (at 23°C, 0% RH)</li>

Connection system: quick-closing Camlock - 2" or 3"

diameter (i.e. 50 mm or 75 mm)

Valves: 2" or 3" valve (DN50 or DN75)

Weight: 50 kg

**OTR** = oxygen transition rate



#### MULTILAYER FLEXITANK FOR TRANSPORT AND STORAGE

## **Certificates**

a) Tested according to COA (Container Owner's Association) – Rail impact test.

Flexitank Code of Practice: Version 3, part 2 dated 1.09.2011.

## b) Hygienic safety of the product

- PP fabric for FLEXITANK
- PE liners for FLEXITANK
- The Regulation (EC) No.1935/2004 of the European Parliament and of the European Council, on materials intended for contact with foodstuffs.
- The Law No. 258/2000 Coll. on public health protection, the regulation Commission No.10/2011, on materials intended for contact with foodstuffs.

# 1. MULTILAYER FLEXITANK FOR TRANSPORT APPLICATIONS

Multimodal transportation – road, sea, railway.



# 1a) ROAD TRANSPORTATION – transportation in 20' container



Filling process



Bulkhead installation - bottom valve

# 1a) ROAD TRANSPORTATION in 20' container

Top charge



Note: filling of chemicals

Bottom charge



Note: filling of wine

# 1a) ROAD TRANSPORTATION – filled FLEXITANK 24 m<sup>3</sup>



# 1b) RAILWAY TRANSPORTATION in 20' container

Process of filling



Filled FLEXITANK on a wagon



# 1c) SEA TRANSPORTATION – Rough use/filling of FLEXITANKS on open sea



20' containers installed on boat



# 1c) SEA TRANSPORTATION in 20' container

## Process of filling on open sea



## Partly filled FLEXITANK

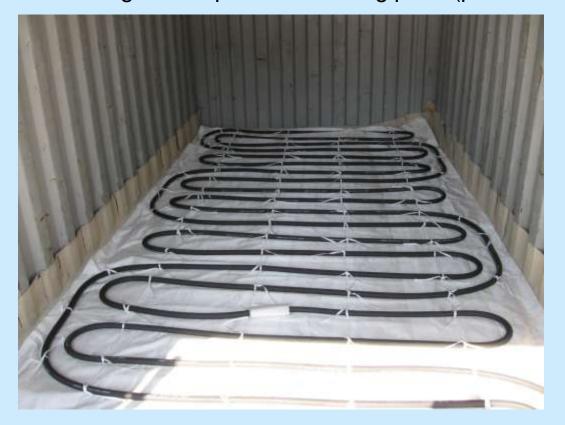
Absorption of heavy liquid movements during process of filling = Dynamic stresses absorption. No damage and leaks.

Normally forbidden way of filling.



# **HEATING SYSTEM FOR FLEXITANKS – allows heating of liquid**

- Hot Steam source needed
- Installed on a container floor
- Used for liquids with a higher temperature melting point (palm oils etc.)



#### **BORNIT DESIGN OF FLEXITANKS – basic ADVANTAGES**

- Extreme ability to absorb dynamic and static stresses due to movements of liquids.
- High compatibility and resistance to different chemicals
- General safety and quality of all components. Temperature resistance up to 70° C.
- Aseptic Flexitank on request free of bacterias.
- Quality of welding and sewing process.
- Short lead times.
- Service and assistance provided.
- Customized solutions and innovations.

# 2. FLEXITANK FOR STORAGE APPLICATIONS

#### **FLEXITANK FOR STORAGE**



# **Agriculture**

**ANIMAL WATERING** 

cattle, sheep, horses

**STORAGE** 

liquid fertilizers, molasses

**PLANT WATERING** 

vegetables, vineyards

#### FLEXITANK FOR STORAGE APPLICATIONS

## **FLEXITANK** for storage of liquid fertilisers

FLEXITANK is delivered with external Safety bag

#### Filter of gross particles:

- Traps gross dirts from tank cars during filling process
  - Quick control of quality of fertiliser





## FLEXITANK FOR STORAGE APPLICATIONS

# **FLEXITANK** for storage of liquid fertilisers

#### **Open-air storage:**

- Flat surface without sharp objects
- Flexibility for fertiliser use

- Storage close to the fertiliser application



#### FLEXITANK FOR STORAGE APPLICATIONS

# **FLEXITANK** for storage of liquid fertilisers

#### **Indoor storage:**

- Safe against damage from third side
- Use of existing storage places
- Improved protection against weather conditions





#### **FLEXITANK FOR STORAGE**





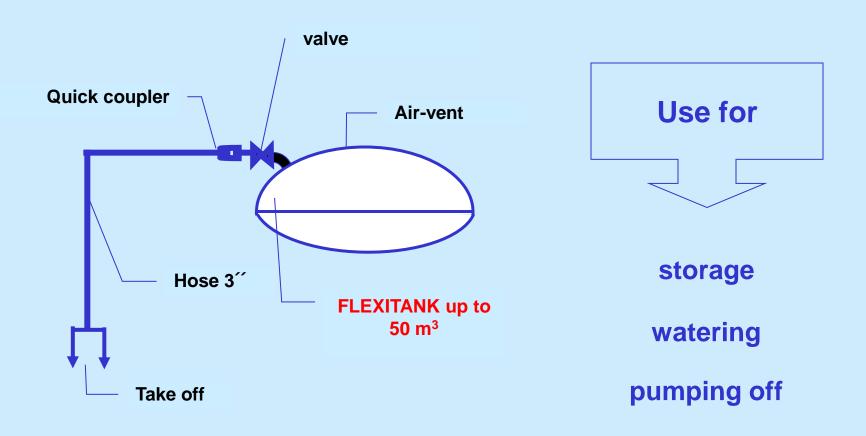
## **EMERGENCIES**

distribution of potable water

water tanks

pumping off

## **FLEXITANK FOR STORAGE**

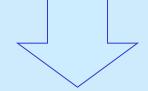


## FLEXITANK - LONG TERM OUTSIDE STORAGE





Weather resistance



outdoors
28 Feb 2010
at -12°C

# **FLEXITANK** for Storage and Transportation

Easy handling and positioning



Installation and packing





Thank you very much for your attention.

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