

# DRUM CONTAINMENT BAG

## CHEMPROTEX™ X



RESPIREX™

## Description

A **gas-tight containment bag**, designed to cover a typical 200 litre (600mm ø x 880mm) drum used for chemical storage and transportation. The bag is designed to safely contain and transport drums that are leaking or emitting hazardous vapours.

Manufactured in **Chemprotex™ X**, a high performance multi-layer chemical-barrier fabric, the drum containment bag is lightweight and extremely durable.



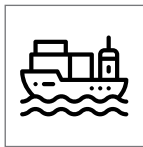
## Applications



Fire  
Brigades



Chemical  
Transport



Shipping



Chemical  
Industry



Petro-  
Chemical



Nuclear



## Tested



ISO 17491-1:2012 | Method 2  
Gas-Tight Chemical Protective Clothing

## Material Performance



FINABEL 0.7.C  
Chemical Warfare Agents



EN 14126:2003  
Protective Clothing Against Infective Agents

## Key Features

Heavy duty **gas-tight zip** around three sides of the bag for ease of access.

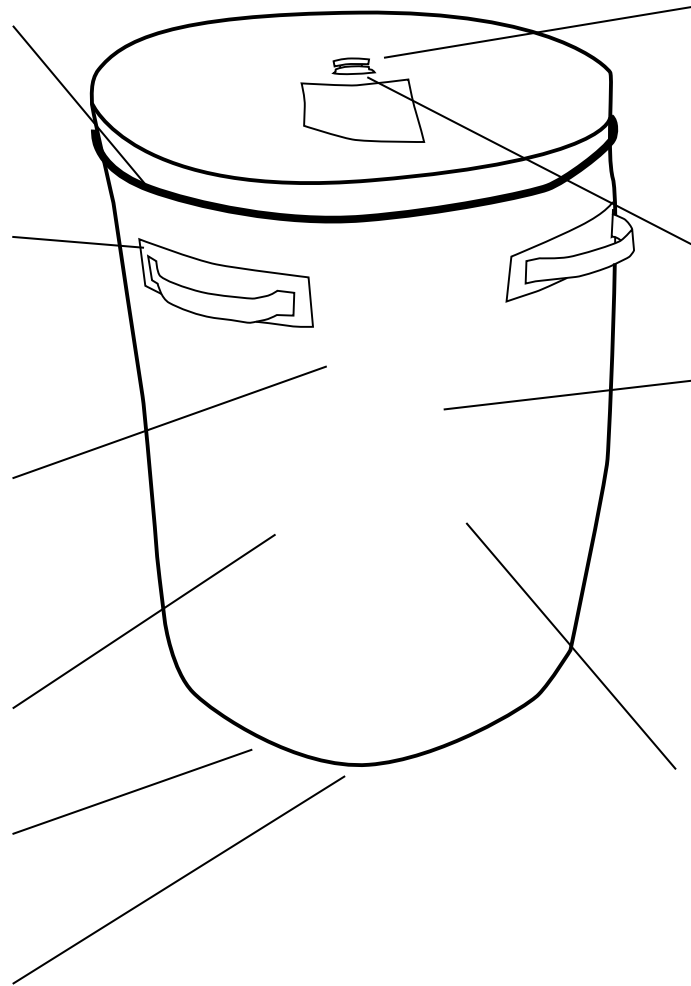
**Positioning straps** to assist with placement of the bag over the drum  
(**N.B.** they are not for to be used lifting/moving the bag when full)

Manufactured with a **Chemprotex™ X shell**, which provides excellent protection against a broad range of chemicals

Provides a physical barrier to **particulate, liquid, vapour and gas** materials

**Antistatic** - Conductive strip on base provides path to ground.

Durable material with **double skinned base** for abrasion protection



**For use with a chemical filter** with a RD40x1/7" thread (supplied separately) allowing vapours/gasses to safely vent out of the bag and preventing a buildup of pressure.

**Shut off cap** over filter port prevents outflow from the bag during handling when no filter is required

Durable, lightweight material for ease of transport, handling and storage

**Seven year maintenance free shelf-life**, maximum shelf life 10 years

Internal gas-tightness **pressure test to ISO 17491-1:2012 Method 2** conducted prior to despatch to confirm the bag is gas-tight

## Accessories



### Chemical Filter

Fitted externally, the CleanAIR CRRN A2B2E2K2P3 filter is supplied in a sealed bag and provides protection against organic, inorganic and acid gases and vapours as well as ammonia and organic ammonia derivatives, solid and liquid, radioactive and toxic particles, plus micro-organisms (e.g. bacteria and viruses) as well as chemical and biological warfare agents. The filter uses a standard RD40x1/7" thread and allows gasses to safely exit the bag, avoiding a build up in internal pressure.

# Specifications

## Drum Containment Bag (Chemprotex™ X)

Product Code	BLCB004/146
Dimensions	68x68x96 cm
Pack Size (max)	50x120x15 cm
Pack Weight (max)	1.8 kg
Carton Qty	5
Outer Carton Size	40x62x84 cm
Outer Carton Weight (max)	10.4 kg
Commodity Code	42021250

*Specifications are for guidance only*

# Material Properties

Property	Test Method	Property value of Chemprotex™ X	Performance Class of Chemprotex™ X	Minimum Class Required For EN943-2:2019
Abrasion resistance	EN 12974-2 (inc. pressure drop)	> 2,000 cycles	6	4
Flex cracking resistance	EN ISO 7854 Method B (inc. pressure drop)	> 1250 cycles	2	1
Flex cracking resistance at low temperatures (-30°C)	EN ISO 7854 Method B at -30°C (inc. pressure drop)	> 200 cycles	2	2
Trapezoidal tear resistance	EN ISO 9073-4	>150 N	6	3
Puncture resistance	EN 863	> 50 N	3	2
Tensile strength	EN ISO 13934-1:1999	> 250 N	4	4
Resistance to flame	EN 13274-4 Method 3 modified (inc. pressure drop)	No part ignited or continued to burn on removal from the flame	2	1
Seam strength	EN ISO 13935-2	> 500N	6	5

Material tested in accordance with Table 1 of EN943-2:2019 - Minimum performance requirements of chemical protective clothing materials for regular robustness suits.

## Chemical Warfare Agent Protection

The Chemprotex™ X material has been tested for resistance to permeation by chemical warfare agents in accordance with FINABEL O.7.C methods at the respected TNO laboratories.

Both the material and seams were found to offer an extremely high level of protection against the following agents:

- Mustard agent (HD)
- Sarin (GB)
- Soman (GD)
- VX

Table 1 Material samples

Agent	Breakthrough time (hours)	Temperature (°C)
HD	>48	37
GB	>48	37
GD	>48	37
VX	>48	37

Table 2 Seam samples

Agent	Breakthrough time (hours)	Temperature (°C)
HD	>48	37
GB	>48	37
GD	>48	37
VX	>48	37

## Resistance to penetration by Infective Agents

The material has passed the requirements of EN14126:2003 for protective clothing against infective agents. It is therefore suitable to provide protection against blood, blood-borne pathogens, body fluids, biologically contaminated aerosols and both wet and dry microbial penetration.

Tested According To	Requirement	Level of Performance	EN14126:2003 Class
ISO 22610:2006	Resistance to wet microbial penetration	> 75 min	6
ISO 16603:2004	Resistance to penetration by blood and body fluids using synthetic blood	Pass	N/A
ISO 16604:2004	Resistance to penetration by blood-borne pathogens using bacteriophage Phi-X174	20 kPa	6
ISO/DIS 22611:2003	Resistance to penetration by biologically contaminated aerosols	> 5 (Log R)	3
ISO 22612:2005	Resistance to dry microbial penetration	<1 (Log <sub>(10)</sub> CFU)	3

## Storage Conditions

The Drum Containment Bag manufactured from Chemprotex™ X should be stored under the following conditions:

- Temperature range of -5°C to +30°C.
- In dry conditions above ground level; away from direct sunlight and in an environment free from harmful gases and vapours.
- Only remove from its original packaging when intending to use.
- Care should be taken when storing at extreme temperatures. At subzero temperatures the flexibility of the material may be reduced, resulting in a potential lowering of protection.

## Disposal

Incineration is acceptable as no halogens are present or used in the manufacture. The calorific value is the same as oil; however uncontrolled combustion can lead to noxious fumes and un-burnt hydrocarbons. All components are thermoplastic and can be recycled as mixed polyolefin where facilities exist. The film has been designed not to biodegrade due to its intended application, so the film will not destabilise or cause toxic leach if used in landfill.

The product is comprised mainly from ethylene gas which is a by-product of oil production and refining which was once flared. No formal carbon footprint has been made on this product, however provided the product is not incinerated overall carbon dioxide release to the atmosphere during production and disposal will be low.

# Chemical Permeation & Permasure®

Chemical	Physical State	Chemprotex™ X	Seams	Viewing Window
Acetone	Liquid	> 480 mins	> 480 mins	> 480 mins
Acetonitrile	Liquid	> 480 mins	> 480 mins	> 480 mins
Ammonia	Gas	> 480 mins	> 480 mins	> 480 mins
Carbon Disulphide	Liquid	> 480 mins	> 480 mins	> 480 mins
Chlorine	Gas	> 480 mins	> 480 mins	> 480 mins
Dichloromethane	Liquid	> 480 mins	> 480 mins	> 480 mins
Diethylamine	Liquid	> 480 mins	> 480 mins	> 480 mins
Ethyl Acetate	Liquid	> 480 mins	> 480 mins	> 480 mins
n-Heptane	Liquid	> 480 mins	> 480 mins	> 480 mins
Hydrogen Chloride	Gas	> 480 mins	> 480 mins	> 480 mins
Methanol	Liquid	> 480 mins	> 480 mins	> 480 mins
Sodium Hydroxide 40%	Liquid	> 480 mins	> 480 mins	> 480 mins
Sulphuric Acid 98%	Liquid	> 480 mins	> 480 mins	> 480 mins
Tetrahydrofuran	Liquid	> 480 mins	> 480 mins	> 480 mins
Toluene	Liquid	> 480 mins	> 480 mins	> 480 mins

All tests carried out under laboratory conditions by independent accredited laboratories in accordance with EN ISO 6529 unless otherwise stated. Table shows average breakthrough times in minutes.

For full details of the chemical permeation performance of Chemprotex™ X and its performance against chemical warfare and infective agents, please visit the materials section of the Respirex website [www.respirex.com](http://www.respirex.com).

The CBRN body bag is compatible with the **Permasure** toxicity modelling app, available for Android and IOS devices. Permasure calculates safe working times for a database of over 4,000 common industrial and toxic chemicals, basing its calculations of the actual working conditions at the time. For full details visit [www.respirex.com/permasure](http://www.respirex.com/permasure)

Specifications, configurations and colours are subject to change without notice. PermaSURE® is a registered trademark of Industrial Textiles and Plastics Limited. Respirex and Chemprotex™ are registered trademarks of Respirex International Limited



## RESPIREX™

Living + Breathing Personal Protection