

# CBS™ High Security Co-XStraws

The fully optimized system for storage at -80°C



## Reliability & Security

- Guaranteed leak-proof
- Mechanically resistant to pressures of up to 150 kg/cm<sup>2</sup>
- Indestructible under normal conditions of use
- Full seals eliminate any possibility of cross-contamination to the specimen or its environment

## Traceability

- Colors - Primary identification
- ID Printed on external layer

## Bar codes - Positive identification

- A bar code and alphanumerical code inkjet printed on the straw
- Resistant to abrasive ice crystals and plastic materials

## Compatibility

- Ultra low temperature mechanical freezers (-80°C)

### Authorised distributor

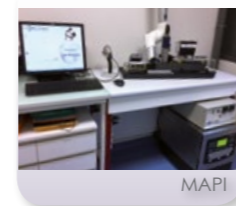
#### In Australia:

For customer service, call 1300-735-292  
To fax an order, use 1800-067-639  
To email an order, ordersau@thermofisher.com

#### In New Zealand:

For customer service, call 0800-933-966  
To fax an order, use 0800-329-246  
To email an order, ordersnz@thermofisher.com

# CBS™ High Security straws



Distributed by:

**ThermoFisher**  
SCIENTIFIC

## International standards compliance

(Does not apply to CBS™ High Security Co-XStraws for the moment)

- CE marked Medical devices
- FDA 510 (k) approved

## Technical features

- Fully secured in LN2 storage
- CBS™ High Security 0.3 and 0.5 mL straws and Co-XStraws  
Length: 130 mm after sealing  
Internal diameter: 2.5 mm
- CBS™ High Security 2 mL straws  
Length: 130 mm after sealing  
Internal diameter: 5 mm

## Application fields

- Biorepositories for epidemiological and disease research
- Hospital biobanks
- Cell and genetic therapy units
- Pharmaceutical companies producing vaccines from living cells
- Genetic heritage archives
- Sperm banks
- Laboratories and clinics specialized in reproduction biology



www.cryobiosystem-imv.com

# CBS™ High Security straws

A unique fully secured system for storage in cold and ultra-cold temperature



For the highest quality cryopreservation of biological samples

Connected to... LIFE SCIENCES

**Cryo Bio System**  
Groupe I.M.V. Technologies

Edition 01/2017 CBS 1.05.1287.1. Non contractual pictures and technical specifications. This document has been produced using chlorine-free FSC Mixed Sources paper from well managed forests and printed with vegetable inks by an ISO 14001 and 9001 certified company holding the Impprim'Vet and Print Environment ecolabels.

# CBS™ High Security straws



## CBS™ High Security straws

- CBS™ High Security straws are made from a transparent ionomeric resin **chemically inert and biocompatible**.
- **There are** three different volumes available: **0.3, 0.5 and 2 mL**.
- **Resistant and fully secured for LN2 storage**

## CBS™ High Security Co-XStraws

- **CBS™ High Security patented straw** using a technology of 2 layers extruded at the same time where the external enables a printing on the full length. Available in 8 colors for storage at -80°C.
- **Dimensions identical to the CBS™ straw**, inside of material identical to the CBS™ straw but with an outer PETG envelope for color guiding and space saving. Two different volumes available: 0.3 and 0.5 mL.
- **Storage space efficiency improvement** (+14 %)
- Optimization for space in CBS™ visotubes (14 → 16)
- Large window for printing



## Quality cryopreservation

- All CBS™ containers are developed to **optimize cryopreservation** of precious samples.
- CBS™ High Security straws benefit from a **high surface to volume ratio** for improved and **homogenous heat exchange** over the **total volume** of the straw.
- Thermal seal of CBS™ High Security straws, vitrification straw and tube enables **direct and complete immersion** in liquid nitrogen.
- **Color and bar code identification** without impairing the quality of the samples through temperature changes.



Digitcool brand

## Straw technology concept

- CBS™ High Security straws are designed for cryopreservation of liquid biological samples such as plasma, serum, buffy coat, red blood cells, extracted DNA, urine, mouth wash, cell suspensions, bacterial or viral strains, gametes, embryos and gonadic tissue.



## Functional plug

- CBS™ High Security straws are filled by aspiration through an air permeable plug.
- Plug made of two specifically woven polyamide fibers enclosing a polymerizing powder. Available in 7 colors for the 0.5 mL version. Always white plug for the 0.3 mL version or 6 colors with plastic rod inserted.



## Filling, sealing and identification

- Directly after filling, both extremities of the CBS™ High Security straws are thermally sealed with dedicated equipment: SYMS III, PACE, MAPI or DIVA.
- Four types of straws filling and sealing process, one for each equipment:
  - Sealing one extremity at the time with SYMS III after manual filling with micro-aspirator. Identification can be preprinted or labels
  - Automatic filling and sealing with PACE for pre-printed CBS™ High Security straws
  - Automatic filling, sealing and printing with MAPI. ID and barcode are inkjet printed.
  - Fully-automatic filling, sealing, identification and sorting with DIVA.
- This technology makes the straw absolutely leakproof, preventing cross-contamination between the sample and its environment.



# CBS™ storage system

CBS™ High Security Co-XStraw

CBS™ High Security straw

16 CBS™ Co-XStraw maximum

CBS™ visotube  
12 different colors

14 CBS™ High Security straw maximum

192 CBS™ Co-XStraws

CBS™ Daisy goblet  
8 different colors

168 CBS™ High Security



Rack for CBS™ goblets

- Specially designed racks for CBS Daisy goblets
- ▶ 3 drawers (3 x 8), 24 goblets,
  - ▶ 4 drawers (4 x 8), 32 goblets,

CBS™ canister

- Canister designed to receive Daisy goblets equipped with lifter
- ▶ 5 different height, from 2 up to 6 goblet



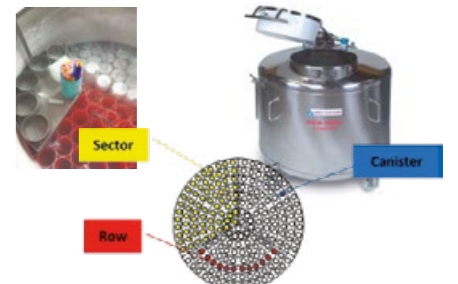
-80°C freezer



Upright freezer set-up with CBS racks (4 drawers) for daisy goblets



-196°C LN2 container



Liquid Nitrogen tank storage set up with CBS canister in or gas phase.

Authorised distributor

**In Australia:**  
For customer service, call 1300-735-292  
To fax an order, use 1800-067-639  
To email an order, ordersau@thermofisher.com

**In New Zealand:**  
For customer service, call 0800-933-966  
To fax an order, use 0800-329-246  
To email an order, ordersnz@thermofisher.com

**ThermoFisher**  
SCIENTIFIC