## **CBS<sup>TM</sup> High Security Straws**

- All CBS<sup>TM</sup> 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.





### INTERNATIONAL STANDARDS COMPLIANCE

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



- Fully secured in LN2 storage
- CBS<sup>™</sup> High Security 0.3 and 0.5 ml straws 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



- 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





# CBSTM HIGH SECURITY STRAWS

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



For the highest quality cryopreservation of biological samples









## **CBS<sup>TM</sup> 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.



### STRAW TECHNOLOGY CONCEPT

• CBS<sup>TM</sup>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 or MAPI.
- 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<sup>TM</sup> High Security straws.
  - Automatic filling, sealing and printing with MAPI, ID and barcode are inket printed.
- This technology makes the straw absolutely leakproof, preventing cross-contamination between the sample and its environment.

## **CBS<sup>TM</sup> High Security Straws**



CBS™ HIGH SECURITY STRAW



**CBS™ VISOTUBE** can contain 14 CBS™ High Security straws

OR



CBS™ DAISY GOBLET 8 different colors can contain 168 CBS™ High Security straws



RACK FOR CBS<sup>TM</sup> GOBLETS
Specially designed racks for
CBS<sup>TM</sup> Daisy goblets
> 3 drawers (3x8), 24 goblets
> 4 drawers (4x8), 32 goblets



CBS<sup>TM</sup> CANISTER

Canister designed to receive

Daisy goblets equipped with lifter

> 5 different heights,

from 2 up to 6 goblets





-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™ canisters in liquid or vapor phase







