

PRODUCT SPECIFICATION

PRODUCT NAME : PENROSE DRAINAGE TUBING – X-RAY OPAQUE

Special Features

- Smooth tubing wall both inside and on the outside
- Sterile and ready to implant
- Complies with ASTM D 3579

Product Information

Material : Natural Rubber Latex

Colour : Pale Yellow, the colour may vary due to storage time and conditions.

Sterilization : Ethylene Oxide / Gamma as per customer requirement

Labeling : Shall comply with the corresponding labelling specification and customer requirement.

Shelf Life : 5 years from the date of manufacture.

Storage condition : Shall be stored in cool dry place and away from direct light.

Packaging Details

Pouch	1 piece
Inner Box	50 pieces
Master Carton	800 pieces (16 inner boxes)
20 feet container	3,34,400 pieces (418 cartons)
40 feet HC container	8,12,000 pieces (1015 Cartons)

Certifications : CE

ISO 9001 : 2008

ISO 13485 : 2003

Quality Standard : ASTM D 3579

Physical Dimensions

Description	Size (All dimension in mm)							
Diameter	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"
Length, mm, Min.	All sizes 457 mm (18") ±15 mm or 304 mm (12") ± 15 mm or as required by customer.							
Flat Width, mm.	10 ± 1	15 ± 1	20 ± 1	25 ± 1	30 ± 1	35 ± 1	40 ± 1	50 ± 1

*Note: - Length and width can be varied as per customer requirement.

LENGTH : The length shall be expressed in millimetres as measured from end to end and parallel to the axis of the tube.

WIDTH : The flat width of the tube shall be expressed in millimeters as measured at a right angle to the axis of the tube. Three random measurements shall be taken and averaged.

Physical Properties

Characteristics	Before Ageing	After Ageing (70± 2 °C for 166 ± 2 hrs) or (100± 2 °C for 22 ± 0.3 hrs)
Tensile Strength (Mpa) min.	21 mpa Min	16 mpa Min
Elongation at break (%) min.	700% Min	500% Min

Directions for use:

1.1 Preparation for use : Ensure selection of Penrose Drainage Tube with correct size.

Below is the correct size width:

Designation	Size (All dimension in mm.)							
	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"
Length, mm, Min.	All sizes 457 mm (18") \pm 10 mm or 304 mm (12") \pm 10 mm or as required by customer.							
Width, mm.	10 \pm 1	15 \pm 1	20 \pm 1	25 \pm 1	30 \pm 1	35 \pm 1	40 \pm 1	50 \pm 1

1.2 How to use

Proper application of a Penrose Drainage Tube is crucial to ensure successful use.

The area around a Penrose drain can get messy, as one might imagine given the purpose of the drain. There are several different ways to manage a Penrose drain. Some care providers fit a bladder or bag over the end to collect the wound exudates released by the drain. One useful feature of using a bag is that it allows people to track the amount of fluid produced by the wound every day. This information can be logged in the patient's chart.

A Penrose drain can also be surrounded by heavy bandages which absorb the leaking fluid. These bandages need to be changed regularly to prevent additional leakage and keep the skin as clean and dry as possible. Typically the condition of the bandages is noted on the patient's chart to give the patient's care team an idea of how well the wound is healing.

Patients who care for their drains at home are given special soaps to use for cleaning, along with adequate bandages. They are also usually asked to keep a log of their drain care. If signs of infection or other problems appear, a doctor can conduct an examination to determine the next best step.

Eventually, the Penrose drain can be removed. Drain removal usually occurs when it is clear that the wound no longer needs drainage, and can be done in a clinic or a hospital.

1.2 Cautions for Use

- Users should consider the circumstances of use in deciding whether to remove or continue using it.
- Isolated cases of allergic reactions to latex product or powder have been reported. If you experience a reaction to this product, discontinue use immediately and seek medical help.

1.3 Storage Condition

- The atmosphere must always be conducive to the storage of the Penrose Tubing.
- Penrose Drainage Tube before opened for use shall be stored in dark, cool and dry place.
- Penrose Drainage Tube needs to avoid area with excessive heat. The storage areas need to be controlled below 40°C/ 104 °F.
- Penrose Drainage Tube needs to be stored at the areas with good air ventilation.
- Penrose Drainage Tube needs to be shielded from direct sunlight and fluorescent lighting.
- Penrose Drainage Tube needs to be stored far away from any energy radiating and heat generating equipment.

1.4 Expiration Date

The shelf life of the penrose tubing is 5 years from the date of manufacture.