

## TECHNICAL DATA SHEET

### PROMAXCOPPER SHRINK TUBE

**PROMAXCOPPER** shrink tube are antiviral and anti-microbial tubes which is shrinkable by heat on door handles made of steel, aluminium, plastic, wood etc to stop the spread of virus and bacteria. These tubes have top layer with dispersed copper metal in core layer of polyethylene. Adhesive is not required.

Application Segments :

- Offices
- Public places & transport
- Schools
- Hospitals
- Hotels and Restaurants
- Industry

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## 1. Product technical data

PROMAXCOPPER SHRINKABLE TUBE 25/40/55 is a translucent copper dispersed in polyethylene film which is shrinkable by heat on any shape of door handles.

<b>Base Polymer</b>	: Poly ethylene
<b>Colour</b>	: Light brownish, translucent
<b>Tensile Strength [Kgf/cm<sup>2</sup>]</b>	: 310 (ASTM D882)
<b>Elongation [%]</b>	: 630 (ASTM D882)
<b>Minimum Shrink Temperature [°C]</b>	: 115-135
<b>Shrink Ratio</b>	: 2:1 (100 to 120%)
<b>CAS Number Copper/PE</b>	: Cu 7440-5-8 / PE 9002-88-4

<b>SIZE</b>	<b>25 mm</b>	<b>40 mm</b>	<b>55 mm</b>
<b>Diameter[Ø in mm]</b>	<b>25</b>	<b>40</b>	<b>55</b>
<b>Folded Width [in mm]</b>	40	65	90
<b>Thickness [µm,ASTM6988]</b>	300+/-50	375+/-70	450+/-90

## 2. Standard sizes

- 25 mm x 2 m
- 25 mm x 50 m
- 40 mm x 2 m
- 40 mm x 30 m
- 55 mm x 2 m
- 55 mm x 30 m

## 3. Storage – before use

- Storage conditions require an ambient temperature ranging from +15 °C to + 35 °C , with relative humidity between 30 % and 70 %, without direct sunlight exposure.
- Temporary storage
- By storing under direct sunlight, the colour of tubes would change but no effect on antiviral and anti-bacterial activity.

#### 4. Surface preparation and procedure to apply films

Surface preparation :

- Inspect the surface for any dust, grease, old lamination, grooves , sharp edges and corners
- Clean the dust and grease by IPA or any cleaning solvent
- Remove old lamination, covers .
- If grooves or craters are there on the surface, dont use the film as air bubbles would be visible
- Remove any sharp edges as it may cut or damage the film.

Procedure to apply the film :

- The tube is recommended to apply on curved or bumpy surfaces like door knob. (One-side opened type)
- To apply this product, a heating device such as a heat gun or hair dryer must be used. For 55 mm industrial heat gun to be used.
- To remove the tube, slightly scratch it with a knife and then peel it off. (Be careful not to damage the surface to be applied)
- Under overheating condition ,>130°C(260°F) the product may melt
- The antiviral and anti-microbial activity will be retained after washing with water, alcohol, sterilizer, chlorine bleach, and any type of disinfectants.

#### 5. Trade related data

**HS Number : 3917.31.9000**

#### 6. Regulatory

Safety Data Sheet :

When used under normal conditions, this film does not generate or release any hazardous chemicals. This is a non-hazardous product in accordance with the EU criteria. Therefore it is not necessary to prepare a Material Safety Data Sheet for this film. This product is not a hazardous product with regards to transportation legislation; neither does it contain substances that are hazardous to water within the meaning of the EU water act. After use, dispose of the waste product in accordance with the local / national authorities.

#### **DISCLAIMER :**

*The following technical details are issued to the best of our knowledge and confidentiality , however, without any responsibility for results due to several different kinds of material and application processes. Therefore, we recommend before any usage, a test to be conducted on the original surface.*