

## TECHNICAL DATA SHEET

### **PROMAXCOPPER® PET – 55A (Touch Screen)**

**PROMAXCOPPER® PET-55A** films are surface protecting and self-disinfecting Copper dispersed polymer films with special silicon based adhesive suitable for touch screens. Primary function is protection of surfaces against physical damages (scratches, deformations, glass breakage), optical (reduces the effects of light on the substrates) and chemical (by creating a physical barrier and limiting the contact with liquids). Also, it has proven properties to disinfect itself from virus (including Coronavirus) and bacteria by 99.9% count within 30 minutes. These films have coating of copper metal over core layer of Polyethylene terephthalate (PET), Silicon PSA adhesive and release film/liner of PET. The films are easy to use with automatic removal of air bubbles. Removal of films are also easy with no adhesive residue on touch screens.

#### Application Segments :

- Smart Phone
- Tablets
- Touch Screens – Airlines Media, EV taxis , Elevator panels
- Offices and schools -where tablets are shared
- Public places & transport – touch screen
- Hospitals – Touch screen
- Hotels and Restaurants – counter touch screens
- Industry – Touch screens

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## 1. Product technical data

PROMAXCOPPER® PET-55A (Touch Screen) is a translucent copper dispersed in polyethylene terephthalate film **with silicone adhesive and PET liner.**

<b>Base Polymer</b>	: Polyethylene Terephthalate
<b>Colour</b>	: Light brownish, translucent
<b>Film Thickness [<math>\mu\text{m}</math>]</b>	: $55 \pm 3$
<b>Adhesive</b>	: Silicone
<b>Release Paper Thickness [<math>\mu\text{m}</math>]</b>	: $150 \pm 10$
<b>Peel Adhesion SUS180 [gf/25mm]</b>	: $20 \pm 2$ (ASTMD3330)
<b>Tensile Strength [Kgf/cm<sup>2</sup>]</b>	: 1200 (ASTM D882)
<b>Surface treatment (Corona)</b>	: Done on one side
<b>Temperature Resistance [<math>^{\circ}\text{C}</math>]</b>	: 140-150
<b>Tear Strength [Kgf]</b>	: 3.8
<b>CAS Number Copper/PE</b>	: Cu 7440-5-8 / PET 25038-59-9

## 2. Standard sizes

- 40 cm x 10 m
- 123 cm x 50 m

Rolls of 100 M and 500 M are available on request.

## 3. Storage – before use

- Storage conditions require an ambient temperature ranging from  $+15^{\circ}\text{C}$  to  $+35^{\circ}\text{C}$ , with relative humidity between 30 % and 70 %, without direct sunlight exposure. It is imperative to store cardboard boxes horizontally in their packing well supported at the end locks.
- By their nature, adhesives age rapidly before application to their final surface. The adhesive strength of the above films has tendency to weaken over the storage duration.

#### 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
- 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 :

- Carefully remove the adhesive paper from the film and affix the film on target surface from one side.
- Gently press the film from one end on the surface gradually to the opposite end so that no air bubbles are trapped.
- Cut the corners of the film with sharp knife taking the support on the edge of the surface.
- Press the edges or the ends of the film so that they are properly adhered to the surface.

Others :

- The antimicrobial activity will be retained after washing with water, alcohol, sterilizer, chlorine breach, and any type of disinfectants.
- The surface of product can be wiped and handled with any type of usual cleaning methods, such as water, sterilizer, or non-abrasive and mild detergent.
- The film is recommended to avoid to attach on bumpy surfaces in case of getting physical friction.

#### 5. Trade related data

**HS Code : 3920.60.0000**

#### 6. Regulatory

Restriction of Hazardous Substances Directive 2002/95/EC :

As a result of the hazardous substance detection test in accordance with the RoHS Directiveno harmful materials were detected.

Not detected Heavy Metals/Not detected PBBs/PBDEs/ Not detected Phthalates/Not detected Halogen Content

**This product has been tested for food contact materials in compliance with FDA 21 CFR regulations.**

**Active material: copper powder, < 1.0 % w/w of the total product.**

#### 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.*