



TECHNICAL DATA SHEET - ANTIMICROBIAL FILM - PURE ZONE® RANGE - PERMANENT ADHESIVE

## PURZON060

Film consisting of a 2.36-mil (0.06 mm), transparent, cast PVC containing antimicrobial agents and coated with a pressure-sensitive acrylic adhesive. This film is intended for the protection of surfaces against these types of stress: physical (scratches, deformations, glass breakage), optical (reduces the effects of light on the substrates, or even the oxidation of the substrates) and chemical (creates a physical barrier on the surface of the item by limiting the contact with liquids). Due to its pressure-sensitive adhesive, this film can be used as a temporary protection and can also be removed without damaging the substrate.

This film contains a biocide, and its antimicrobial properties protect surfaces against microbes in areas that require a high level of hygiene (hospitals, agribusinesses and food industries, wet rooms, public places, etc.).

### **ANTIMICROBIAL ACTIVITY – PURE ZONE® TECHNOLOGY:**

Antiviral activity on the coronavirus strain SARS-CoV-2 (according to the ISO 21702 standard) (report UB'L3 no. 20201116 NS-2):

- Up to 76 % after a contact time of 60 min.

Antiviral activity on the Human coronavirus strain HCoV-229E (according to the ISO 21702 standard) (report VirHealth R2007HEX001-2):

- 94.99 % after a contact time of 15 min.
- 99.87 % after a contact time of 60 min.

The reduction of > 99,99 % of bacteria (according to ISO 22196) confirmed for the active strains of:

- |   |                                   |
|---|-----------------------------------|
| • <i>Escherichia coli</i>                                   | (report Intertek 14-CHL-0815-02), |
| • <i>Salmonella (Salmonelle enterica)</i>                   | (report Intertek 14-CHL-0815-02), |
| • <i>Listeria (Listeria monocytogenes)</i>                  | (report Intertek 14-CHL-0815-02), |
| • Golden staph ( <i>Staphylococcus aureus</i> )             | (report Intertek 14-CHL-0815-02), |
| • Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) | (report Intertek 14-CHL-0815-02), |
| • <i>Pseudomonas aeruginosa</i>                             | (report Intertek 16-CHL-1301-01). |

### **REACH REGULATION:**

The PURZON060 film complies with the Biocidal Products Directive and ECHA's list of SVHC (Substances of very high concern).

- The film contains a biocide (**silver phosphate glass**) that complies with the REACH Directive. This active ingredient is registered in the Biocides Directive list under the CAS number: **308069-39-8**.
- The film does not contain any ingredient described in the SVHC list.

**FILM FEATURES:**

	<u>Indicative values</u>	
• Thickness:	2.36 mil 0.06 mm	
	<u>Average values</u>	<u>Standard</u>
• Tensile strength:	min. 3.32 lb./in. min. 15 N/25 mm	HEXNFX41021
• Elongation at break:	min. 100 %	HEXNFX41021
• Shrinkage 168 hours at 158 °F (70 °C):	< 0.03 inch < 0.8 mm	HEXRET001

**LINER:**

- Silicone-coated PE paper with HEXIS print.
- Stable under hygrometric variations.

**ADHESIVE PROPERTIES:**

(Measured average values at publication of the technical data sheet)

	<u>Average values</u>	<u>Standard</u>
Peel strength test 180° on glass:		
after 20 min. of application	3.32 lb./in. 15 N/25 mm	HEXFTM001
after 24 hours of application	3.76 lb./in. 17 N/25 mm	
Initial tack	4.43 lb./in. 20 N/25 mm	HEXFTM009
Release	0.11 lb./in. 0.5 N/25 mm	HEXFTM003

- Resistance to solvents: the adhesive is resistant to most chemicals (alcohol, diluted acids, oils).

**ADHESIVE:**

- Solvent-based, acrylic adhesive.
- Immediate and permanent adhesion.

**USER'S INSTRUCTIONS:**

- Under normal usage conditions, harmless when in contact with human skin (skin compatibility study carried out under dermatological control).
  - ✓ No allergenic potential.
  - ✓ No irritant potential.
- Active compound: Silver ions, < 3 % w/w of the entire product.
- Antimicrobial activity maintained after 365 cleanings with water, alcohol, chlorine bleach and Aniosurf® (respect the dilution recommended by the manufacturer).
- The film can be cleaned/disinfected by all conventional cleaning methods, using non-abrasive accessories, cleaning products, detergents or products currently used in healthcare environments.

The disinfection levels achieved are compatible with common usage in the most sensitive areas in terms of infectious risks (surgery wards, immunocompromised wards, neonatology, etc.).

- Only apply the film to areas that will not be in direct contact with unpackaged food.
- Suitable for application to regular or irregular surfaces.
- Recommended minimum application temperature: +50 °F (+10 °C)
- Operating temperature range: from -40 °F to +194 °F (-40 °C to +90 °C).
- It can be used for the cold-laminating of cast HEXIS digital printing films printed with solvent, eco-solvent, latex or UV inkjet technology.
- In the case of an already painted substrate, self-adhesive media must only be applied to undamaged original paintwork. If the paintwork is not original and/or damaged, the application and the removal are at the judgement and risk of the installer.

## **OPERATING RECOMMENDATIONS:**

- Before applying this laminate to a HEXIS digital printing film, which has been printed with solvent inks, it is recommended to respect the following optimal drying time for the inks:
  - 48 hours if the printed film is cast,
  - 24 hours if the printed film is calendered.
- For more information on the application method of the PURZON060 film, please refer to the Application Guide on the "Professionals" pages, category "Laminates" on the site [www.hexis-graphics.com](http://www.hexis-graphics.com).

## **STORAGE:**

- Shelf life (before application):

The shelf life of this film is 1 year when stored upright in its original packaging in a dust-free environment at a temperature ranging from +59 °F to +77 °F (+15 °C to +25 °C) with relative humidity of 50 %.

## **DURABILITY:**

- The bacteria reducing properties are inherent to the film featuring PURE ZONE® technology (when stored in its original packaging) and confirmed for Golden staph (*Staphylococcus aureus*) (Standard ISO 22196) (report Eurofins I-P-QM-FOR-9081941):
  - Initially: > 99.99 %
  - After 6 years: > 99.99 %
- Vertical indoor exposure: up to 5 years (in areas not subject to frequent handling or high visitor frequency).

*A film applied in areas of frequent handling (e.g.: handles) or high visitor frequency will be subject to repeated abrasion which will reduce its durability (change of appearance, lifting, etc.). The film durability depends on the intensity and frequency of the mechanical stress to which it is exposed.*

### **NOTES:**

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the medium for each application.

The measuring methods for the standards quoted above served as the basis for the development of our own measuring methods which are available on request. Please feel free to contact us to get the latest instructions in use.

All the published information is based on measurements regularly performed in the laboratory. It does not however constitute a binding guarantee. The seller cannot be held liable for indirectly related damages and assumes no liability for claims that are higher than the replacement value of the purchased product. All specifications are subject to potential changes without prior notice. Our specifications are automatically updated on our website [www.hexis-graphics.com](http://www.hexis-graphics.com).