3-121-17T-H1F

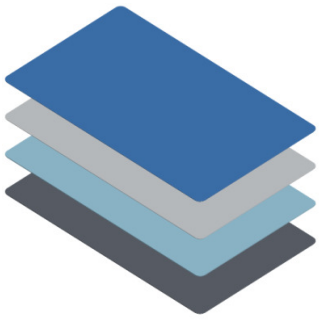
Anti-Microbial Film

Product Description

3-121-17T-H1F is a 50 micron clear printable polyester material. This product incorporates PC-1000 anti-microbial topcoat which offers excellent protection against microbes and mould. The coating ensures microorganisms that cause contamination and infection, including those responsible for odours and staining are eradicated. This offers additional protection to pre-printed labels and working surfaces. The active ingredient used in the topcoat is EPA , EFSA and FDA approved and the coated product formulation conforms to all REACH requirements.

3-121-17T-H1F withstands abrasion, general cleaning agents and handling environments.

Product Construction



- 8µm PC-1000 Anti-Microbial Gloss Topcoat
- 50µm Polyester Film
- 20µm Permanent Acrylic Adhesive
- 36µm Polyester Liner

Product Applications

CCL Design has created this product for use in a number of applications to help get people back to work, school and into a ‘new normality’. 3-121-17T-H1F has the following key features:

- Approved by independent lab to BS EN ISO 22196 global anti-microbial standard.
- Effective against a broad range of microorganisms – bacteria, virus, fungus- with reduction in microorganism of >99.9% over 24 hours.
- Prevents staining from mould and algae.
- Durable to cleaning chemicals and abrasion.
- Acts as a complementary measure to routine cleaning by continuously killing microbial contaminants and resisting microbe growth.
- Active substances used in PC-1000 topcoat has been successfully tested against fatty enveloped viruses, such as Influenza, Avian flu and SARS.
- Can be used as an overlaminate where printed images and text are required.

3-121-17T-H1F is particularly suitable for applications where an anti-microbial laminate can enhance environmental protection from touching hard surfaces in communal areas. Example of use can be on tables, trays, door push plates, screens, dividers and work surfaces.

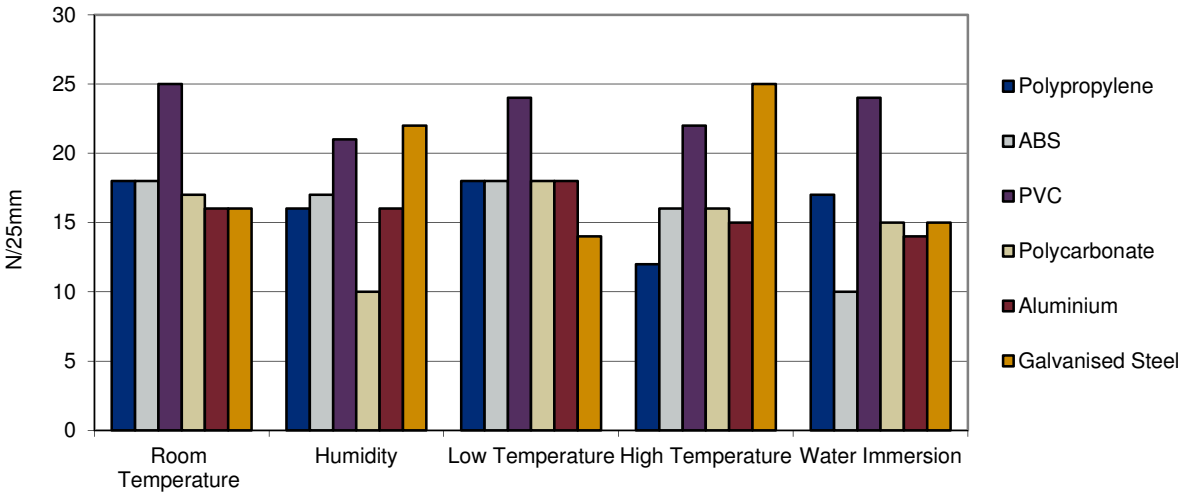
Typical Test Conditions

3-121-17T-H1F has been tested according to the following industry standards and relevant customer test specifications.

Test Type	Test Method
Normal Duty Abrasion	Taber abrader under 250g pressure for >1000 cycles using CS-8 wheels
Sutherland Rub Test	>5000 cycles using 1.8kg weight at speed 2 (42 cycles/min)
Chemical Resistance	30 second hand rub under 2kg pressure using a cloth soaked in: - Oleic Acid - Nivea Hand Cream - Nivea Sun Cream - Vaseline Intensive Care - Johnson's Baby Oil
Defacement Test	10 rubs back and forth under 1kg pressure using a metal round edge
Tape Test	610 and 810 tape applied to sample. Removed after 30 seconds.
Cross-hatch Test	Etch 25 x 1mm by 1mm squares into the topcoat and apply 610 and 810 tape. Remove after 30 seconds.
Chemical Immersions	>100 hours immersed in the following: - Oleic Acid - Nivea Hand Cream - Nivea Sun Cream - Vaseline Intensive Care - Johnson's Baby Oil
Sweat Test	>140,000 cycles under 500g weight in artificial sweat solution

Adhesive Performance

H1 20micron Permanent Acrylic Adhesive
Typical properties based on 50micron polyester



Test Condition	
Room Temperature:	72 hours at standard atmosphere
Humidity:	72 hours at 40°C / 95% RH
Low Temperature:	72 hours at -40°C
High Temperature:	72 hours at 60°C
Water Immersion:	72 hours room temperature water immersion

Temperature Range

Recommended range: Up to 100°C (212°F).

Product Application	The application surface should be clean and dry. In order to optimise performance, surface temperatures should be around room temperature.
Storage Conditions	3-121-17T-H1F label material and labels manufactured from this material must be stored between 20°C-28°C, below 75% RH and in sealed packaging.
Shelf Life	If stored under recommended conditions, then this label material will retain it's specified performance criteria for 2 years.
RoHS Compliance	This material meets European (EU) Directive 2011/65/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment. CCL Design can clearly state that our products do not contain halogens and heavy metals etc. in excess of the maximum concentrations stipulated. *NOTE: Product compliance is based upon information provided by independent laboratory testing of our products. CCL Design makes no independent representations or a warranty, express or implied, and assumes no liability in connection with the use of this information.*

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