DATA SHEET

Bubble free Grey Adhesive

Introduction

Bubble free Grey Adhesive Vinyl- AERTEC

Advantages

- Special bubble free technology makes film easier for installation
- Excellent Squeezing bubble free air lines technology accurately positions the films
- Grey adhesive surface with high cover rate
- Vivid Color performance
- Suitable for solvent ink and Eco-solvent ink ,and UV ink print

Applications and Uses

- Bus body advertising
- Subway body advertising

Characteristics

Characteristic	Description
Colors	Milky White
Film	Milky White PVC film
Gloss	Gloss&Matt
Thickness (Film)	100um±10um
Adhesive	Hitacadhesion grey acrylic pressure sensitive adhesive
Adhesive color	Grey
Coating weight(Dry)	28g±2g
Liner	single side PE-coated white bubble free wood-pulp paper
Weight, liner	145g±5g
Application surfaces	Flat and simple curves
Application substrates	Metal, paint, rigid plastic
Application temperature range (air and substrate)	3 ～ 38°C
Removability	N/A

Effective Performance Life

The effective performance life is based on field experience and exposure tests conducted by Lab. When the graphics are processed and used according to the recommendations, they should have the performance life shown in the table below. The actual performance depends on

- *Correct combination of film, ink, over laminate or clearcoat*
- *Drying methods*
- *Selection and preparation of the substrate*
- *Application methods*
- *Orientation and exposure conditions*
- *Cleaning methods*

Printing with Solvent-Based Inkjet Inks

Always test with your combination of printer and ink prior to commercial use.

Total Ink Coverage

Do not exceed 250% total ink coverage for film Aertec . Too high a total physical ink amount on the film results in media characteristic changes, inadequate drying, over laminate lifting, and/or poor graphic performance.

To enhance clour and protect images against UV radiation and abrasion, Aertec is recommended to be over-laminated with Cold over-laminating Film or Clear Coat.

When to Use an Over laminate or Clear Coat

- *Commercial vehicle and fleet graphics; such graphics are subjected to abrasion such as road debris and automatic/power washing.*
- *Any graphic exposed to abrasive washing conditions, including automatic/power washing, harsh cleaners or chemicals.*

Application

Do not stretch the film during application. If you stretch the film it will tent or lift.

Obtain pre-qualification from PMC Technical Service before applying to any un-qualification surface.

When applying graphics to flat surfaces, the temperature range for both the air and substrate is 3°C to 38°C. The film sticks well at the lower end of this temperature range. However, keep these considerations in mind:

- The film becomes less flexible the colder it is.
- At temperatures lower than 3℃moisture may condense on the substrate, which prevents good adhesion.

Maintenance and Cleaning

Use a cleaner such as the kind used for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline.)

Shelf Life, Shipping, and Storage

- For unprocessed film, shelf life is 12 months. Store the film in a dry area, in the original container, out of direct sunlight and at less than 24℃
- The printed film has one month shelf life.

Ship the finished graphic lying flat or in a roll. To roll the graphic, roll it film side out onto a core that is 3 inches or larger in diameter. These methods help prevent the film and application tape from wrinkling or popping off the liner.

Conversion

- ✓ Mild / Eco solvent inkjet
- ✓ UV curable inkjet
- ✓ Latex inkjet
- ✓ Solvent inkjet

Conversion not commended

- Thermal transfer
- Flat bed cutters
- Water based inkjet
- Electrostatic printing
- Die cutting
- Offset Printing
- Screen printing

Product Characteristics

Physical Properties

Features	Test Method	Results
Caliper, face film	GB/T6672-2001	100 micron (μm)
Caliper, liner	GB/T6672-2001	145 gsm
Dimensional stability	FINAT-14	Max. 0.5 mm
Tensile strength		⩾35 N/inch
Elongation		⩾130%
Gloss	GB8807-88，60°	>65
Adhesion, initial	FINAT FTM-1, stainless steel	340 N/M
Adhesion, ultimate	FINAT FTM-1, stainless steel	500 N/M
Tearing		>10000Min
Release	FINAT -4	15 ~ 40 g/inch
Flammability		Self extinguishing
Shelf life	Stored at 24°C/50 -60 % RH	12 Month
Durability	Vertical exposure	3-4 Year

Thermal

Application temperature： +3°C

Temperature range： -20° ~ 60°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents
Resistant to most mild acids, alkalies, and salts

Warranty
Aertec materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing.

Durability
The durability is based on Eastern China exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing north; in areas of long high temperature exposure, in industrially polluted areas or high altitudes, exterior performance will be decreased.

Test Methods：
Dimensional stability:
Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70°C, after which the shrinkage is measured.

Adhesion:
(FTM-1, FINAT) is measured by peeling a specimen at a 180°angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

Flammability:
A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:
A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Chemical Resistance:
All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

Corrosion Resistance:
A specimen applied to aluminium is exposed to saline mist (5% salt) at 35℃. After exposure, the film is removed and the panel is examined for traces of corrosion.