

Avery Dennison® Greenline GP 3400 Series EcoFriendly™* Promotional Films

Features

- Environmentally responsible alternative to traditional self-adhesive PVC films
- Manufactured using a PVC-free, phthalate-free polyolefin, solvent-free emulsion acrylic adhesive and a kraft (wood-free) paper liner. These films contain no polyvinylchloride or monomeric plasticizers, they eliminate any halogen-related disposal concerns.
- Available in the following constructions:
 - GP 3400 Gloss White, Permanent adhesive
 - GP 3401 Gloss White, Removable adhesive
 - GP 3420 Matte White, Permanent adhesive
 - GP 3421 Matte White, Removable adhesive
 - GP 3460 Gloss Clear, Permanent adhesive
 - GP 3461 Gloss Clear, Removable adhesive
- Excellent printability with conventional and UV curable screen print inks, oxidative drying and UV curable offset inks and UV curable inkjet inks
- Excellent conversion and application characteristics
- Excellent dimensional stability during use
- Good UV and weathering resistance

Conversion^

- | | |
|--|--|
| <input type="checkbox"/> Flat bed cutters | <input type="checkbox"/> Cold overlaminating |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Electrostatic printing |
| <input checked="" type="checkbox"/> Die cutting | <input type="checkbox"/> Latex inkjet |
| <input type="checkbox"/> Thermal transfer | <input type="checkbox"/> Eco solvent inkjet |
| <input checked="" type="checkbox"/> Screen printing | <input type="checkbox"/> Solvent inkjet |
| <input checked="" type="checkbox"/> Offset printing | <input checked="" type="checkbox"/> UV curable inkjet |

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

Application

Application on wet surfaces or using a application fluid (wet applied) may result in adhesive residues being left on the surface after removal. As no two surfaces are the alike, trials are recommended prior to use in order to ascertain clean removability.

Standards/Regulations

These products meet the European Toy Regulations EN 71-3 and the January 2007 revision of the EU-Phthalates Directive 2005/84/EC. The products also complies with the US CONEG Model Toxics Legislation and the EC directive 94/62/EC, article 11 on packaging and packaging waste, with reference to the acceptable levels of heavy metals, i.e. sum of heavy metals Cadmium, Mercury, Lead and Chromium (VI) is less than 100 ppm. Also both adhesives are approved in accordance to BfR and the removable is additionally approved to FDA for food contact.

Uses

Avery Dennison Greenline GP 3400 Series is an environmental responsible alternative to traditional pressure-sensitive adhesive films suitable for a wide range of short-term indoor and outdoor promotional graphics and decals.



Description



Film: 60 micron top coated polypropylene



Adhesive: Permanent and removable acrylic (clear)



Backing: One side coated kraft paper, 135 g/m²



Outdoor life:** Up to 1 year unprinted

Common Applications

- Outdoor advertising
- Indoor advertising
- Point of sale promotions
- Labels and stickers
- Exhibition graphics
- Window graphics

Physical characteristics

General

Caliper, facefilm	ISO 534	60 micron
Caliper, facefilm & Adhesive		90 micron
Dimensional stability	DIN 30646	0.2 mm max.
Gloss, Gloss White	ISO 2813, 20°	47%
Matt White	ISO 2813, 60°	4%
Gloss Transparent	ISO 2813, 20°	105%
Opacity, Gloss & Matt White		>85%
Transparency, Gloss Clear		90%
Dimensional stability	DIN 30646	0.2 mm max.
Permanent - Adhesion, 24hrs	FINAT FTM-1, stainless steel	9 N/25mm
Removable - Adhesion, 24hrs	FINAT FTM-2, stainless steel	2.5 N/25mm
Shelf life	Stored at 22° C/50-55 % RH	1 year
Durability **	Vertical exposure (Asia Pacific)	up to 1 year (unprinted)

Thermal

Application temperature	Minimum: +2°C
Service Temperature range	-40°C to +100°C

Chemical

Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion

Note

Materials have to be properly dried and cured before further processing, like laminating, varnishing, trimming, contour cutting or application. The residual solvents can otherwise change the products' specific features and properties.

*Avery Dennison Dennison EcoFriendly is a trademark of Avery Dennison Dennison Corporation. This mark indicates that these products and materials were produced with environmentally beneficial features. For more specific information on Avery Dennison Dennison's eco-friendly product features and corporate philosophy on sustainability, go to www.AveryDennisongraphics.com

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.

Important

Information on physical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications.

They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of any material for their specific use.

All technical data is subject to change without prior notice.

Warranty

Avery Dennison® 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.

All Avery Dennison® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

**Durability

Durability is based on exposure conditions in the normal middle European and central North American regions. 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 the southern hemisphere or south in the northern hemisphere; in areas of long high temperature exposure such as northern Australia; in industrially polluted areas or high altitudes, exterior performance will be decreased. Please refer to Avery Dennison Instructional Bulletin 1.3 for definitions and reductions based on the 'Zone System'.

^Compatible with most printer and ink combinations. Test prior to use.

***Information unavailable at time of printing.

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°C. After exposure, the film is removed and the panel is examined for traces of corrosion.

