# **Avery Dennison®** MPI 1005 SC Gloss Opaque LTR

# Gloss White Supercast with Long Term Removability

# **Features**

- · Excellent printability on eco-solvent, solvent, latex and UV curable printers
- Supercast technology ensures superior conformability to irregular surfaces, including deep channels and recesses
- · StaFlat liner provides easy handling and converting properties
- · Outstanding outdoor durability and performance
- Excellent dimensional stability
- · High gloss finish for superior automotive paint-like appearance
- · Grey adhesive provides extra opacity for blockout performance
- Easy removability with heat for up to 5 years with little or no adhesive residue

# **Description**



**Film**: 53 micron high gloss white Supercast vinyl



Adhesive: Grey permanent acrylic with long term removability

Removability: Up to 10 years



**Backing**: Two side PE coated StaFlat<sup>TM</sup> paper,  $145g/m^2$ 



Outdoor life\*\*: Up to 10 years unprinted

Application surface: Flat, simple curves, rivets, compound curves, corrugations and channels

# Conversion<sup>+</sup>

Flat bed cutters	Cold overlaminating
Friction fed cutters	Electrostatic printing
Die cutting	Latex inkjet
Thermal transfer	Eco solvent inkjet
Screen printing	Solvent inkjet
Offset printing	UV curable inkjet

# **Common Applications**

- Flat sided trucks
- · Corrugated trucks
- · Cars and vans
- Trains and light rail
- Buses
- Marine vessels
- Corporate Signage

# **Application**

- · Avery Dennison Graphics recommend a maximum total ink limit of 270% to ensure optimal performance
- Refer to Instructional Bulletins 1.14, 1.15, 1.17 & 4.14 for printing and application instructions

# **Uses**

Avery Dennison MPI 1005 Supercast Gloss Opaque LTR is a premium gloss white opaque cast vinyl film designed for ease of application on long term outdoor signage or fleet applications where superior conformability, durability, high opacity, outdoor performance and clean and easy removal are required.



<sup>&</sup>lt;sup>+</sup>Always test with your combination of printer and inks prior to commercial use.

# Physical characteristics

# General

Calliper, face film	ISO 534	53 micron
Calliper, face film & adhesive	ISO 534	80 micron
Gloss	ISO 2813, 20°	50%
Dimensional stability	DIN 30646	0.4 mm max
Elongation	DIN 53455 (Unprinted film)	> 100%
Adhesion, 15 mins	FINAT FTM-1, Stainless steel	473 N/m
Adhesion, 24 hrs	FINAT FTM-1, Stainless steel	613 N/m
Adhesion, 1 week	FINAT FTM-1, Stainless steel	770 N/m
Removability ^^	Smooth OEM painted surfaces	Up to 10 years
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure <sup>^</sup>	Up to 10 years (unprinted)

<sup>^</sup> See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

# **Thermal**

Application temperature	Minimum: + 10°C
Temperature range	- 45°C to + 82°C

# Chemical

Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hour immersion	No effect
Chemical resistance	Mild acids	No effect
	Mild alkalis	No effect
Solvent resistance	Applied to aluminium	No effect exposed to:
		Oils, greases, aliphatic solvents, motor oils, heptanes, kerosene, JP-4 fuel

# 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.

# 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 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.

# **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.

(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

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



<sup>^^</sup> Not removable when applied to nitrocellulose paints, fresh screen print inks, ABS, polystyrene & certain types of PVC