# Avery Dennison® 400 Ultra Removable

# Gloss White Calendered Kraft

#### **Features**

- Unique ultra removable adhesive provides clean removability with no adhesive residue from most substrates for up to 1 year
- Good sheet stability and layflatness
- · Excellent printability, conversion and application characteristics
- · High gloss for superior appearance
- · Good dimensional stability during use
- · Up to 2 year outdoor durability
- Good UV, humidity and saltspray resistance

# **Description**



**Film**: 100 micron gloss white monomeric calendered vinyl



Adhesive: Ultra removable acrylic Removability: up to 1 year



**Backing**: One side coated 140gsm, Kraft paper



Outdoor life: up to 2 years (unprinted)

# Conversion

■ Flat bed cutters
□ Friction fed cutters
□ Die cutting
□ Thermal transfer
□ Screen printing
□ Mild solvent inkjet

### **Uses**

Avery Dennison 400 Gloss White Ultra Removable offers good layflatness and is suitable for a wide range of short term indoor and outdoor promotional decals where clean and easy removability is required. This product meets the European regulations for toys and appliances (EN71-3). 400 Gloss White Ultra Removable is also an excellent, cost effective alternative to static cling films.

# **Common Applications**

- · Window graphics
- Point of purchase
- Outdoor advertising
- Indoor advertising
- Exhibition graphics

#### Physical characteristics

# General

Caliper, facefilm	ISO 534	100 micron
Caliper, facefilm & adhesive	ISO 534	135 micron
Dimensional stability	DIN 30646	0.5 mm max
Gloss	ISO 2813, 20º	70 %
Adhesion, initial	FINAT FTM-1, stainless steel	60 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	80 N/m
Removability		up to 1 year
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure	2 years (unprinted)

# **Thermal**

Application temperature	Minimum: + 0°C
Temperature range	- 40°C to + 100°C

#### Chemical

Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hours immersion time	No effect
Sea water resistance	1 year half tide immersion BS 5609:1986	No effect
Solvent resistance	Applied to aluminium and exposed to oils, greases, alphatic solvents, motor oils, heptane, kerosene and IP-4 fuel	No effect

#### 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'.

\*\*\*Information unavailable at time of printing.

# **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  $^{\circ}$ 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. I 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.



Avery Dennison Graphics Solutions Asia Pacific