

3M[™] Die-Cuttable Tape Series DC2000

Technical Data Sheet



Description

3M[™] Die-Cuttable Tape Series DC2000 is a black foam tape designed for the attachment of nameplates, badges, and emblems to the exterior of vehicles. This tape is designed to process easily in all die-cutting operations, including high-speed rotary operations. 3M Series DC2000 tape exhibits high resistance to pluck and torque (twisting) forces normally associated with the attachment of nameplates and emblems.

3M Series DC2000 tape offers the following key features:

- Excellent adhesion to paint and chrome.
- Excellent torque (twist) resistance. 3M Series DC2000 tape has a firm core that resists twisting forces that may result in the detachment of individual letters.
- Excellent resistance to impact in cold weather.

Some typical applications for 3M Series DC2000 tape include:

- Nameplates, badges and emblems.
- Low demand applications whose primary attachment methods are mechanical. Examples include: attachment of lightweight pillar covers, miscellaneous sealing applications and spoiler applications that require tape to perform as a gasket.

Product Construction

Protection Liner (see below) DL-2 Acrylic Adhesive Black Acrylic Polymer Foam DL-1 Acrylic Adhesive



Liner Options

SC2	White, 2-side silicone-coated, High Density Polyethylene
PET	Clear, 2-side silicone-coated, Polyester

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Physical Properties

	DC2005	DC2008	DC2011	DC2015
Thickness	0.51 +/- 0.075mm	0.76 +/- 0.102 mm	1.14 +/- 0.12 mm	1.52 +/- 0.12 mm
Range	(0.020 +/- 0.003in.)	(0.030 +/- 0.004 in.)	(0.045 +/- 0.005 in.)	(0.060 +/- 0.005 in.)
Density	609 +/- 100 kg/m ³	569 +/- 100 kg/m³	545 +/- 100 kg/m ³	529 +/- 100 kg/m ³
Range	(38 +/- 4 lb/ft ³)	(35.5 +/- 4 lb/ft³)	(34 +/- 4 lb/ft ³)	(33 +/- 4 lb/ft ³)

Processing Compatibility

Rotary, flat bed and laser die-cutting operations.

Performance Properties

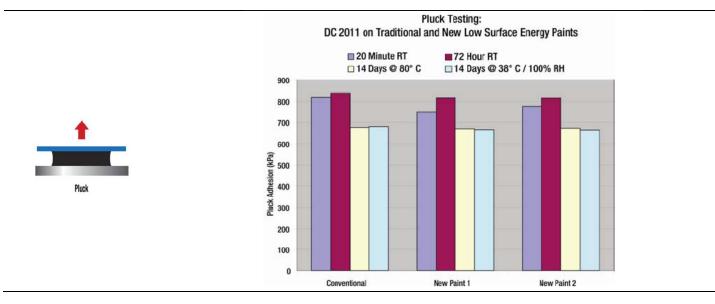
Typical performance of 3M[™] Die-Cuttable Tape Series DC2000 is shown below. These values are for reference only.

Note: Care should be taken to make sure the surface is clean and dry prior to application of the tape and to not saturate the tape with strong polar solvents, like alcohols, after initial application. After adhesion build, the DL-2 adhesive is durable to typical automotive environmental conditions and chemicals and provides a robust attachment solution. If this is a concern, please contact your 3M Technical Representative.

When using solvents, extinguish all ignition sources, including pilot lights and follow the manufacturer's precautions and directions for use.

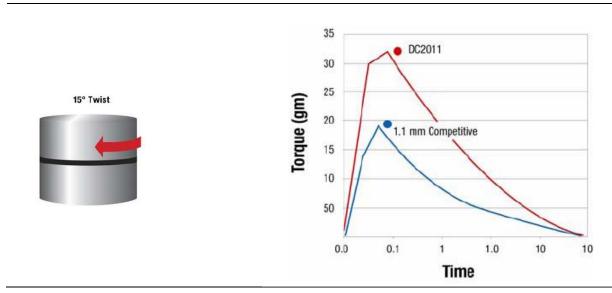
Pluck Testing

Maintains pluck adhesion on new low surface energy and scratch- and mar-resistant paint systems in addition to conventional paint systems.



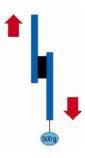
Torque Testing

3M Series DC2000 tape demonstrates higher resistance to twisting forces (torque) compared to typical competitive tapes.



Static Shear

Exceeds 100 hours at 70°C (158°F). Static shear tests are run with 25.4 mm (1.0 in.) wide by 25.4 mm (1.0 in.) long tape on chrome, 6.8 kg. (15 lb.) roll down against enamel paint. Weight is 500 grams (1.1 lb.).



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Shelf Life

Two years from date of manufacture when stored at $4^{\circ}C-38^{\circ}C$ ($40^{\circ}F-100^{\circ}F$) and 0-95% relative humidity (RH). The optimum storage conditions are 22°C (72°F) and 50% relative humidity.

Regulatory Information

Materials Safety Data Sheet (MSDS) available at <u>www.3M.com/MSDS</u>.

Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M application engineer or call product application support at 1-800-328-1684.

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