

Avery Dennison Performance Tapes
Bonding Study:
Rogers Griswold™
Rubber Products

Determining the correct adhesive when bonding to rubber and other materials may be challenging, especially when seeking to provide your customer an accurate quote quickly and accurately. To help you with the adhesive selection, and the technical requirements your customer may require, Avery Dennison Performance Tapes has developed a series of adhesive bonding studies. These studies highlight the performance of our Core Series™ Portfolio products when combined with rubber and other materials from industry leading manufacturers.



Bonding to Rogers Griswold Cellular Rubber

Rogers Griswold rubber products are the leading standard in engineered cellular rubber. The wide range of Griswold cellular rubber products are available in natural rubber, neoprene, EPDM, Nitrile, SBR, sponge/cork, electrostatic dissipative and custom-designed compounds. They are offered in multiple thickness and width options, along with the ability to add textile and film substrates, as well as adhesive, for diverse applications.



Automotive



Appliances



Electronics



Filtration



Industrial

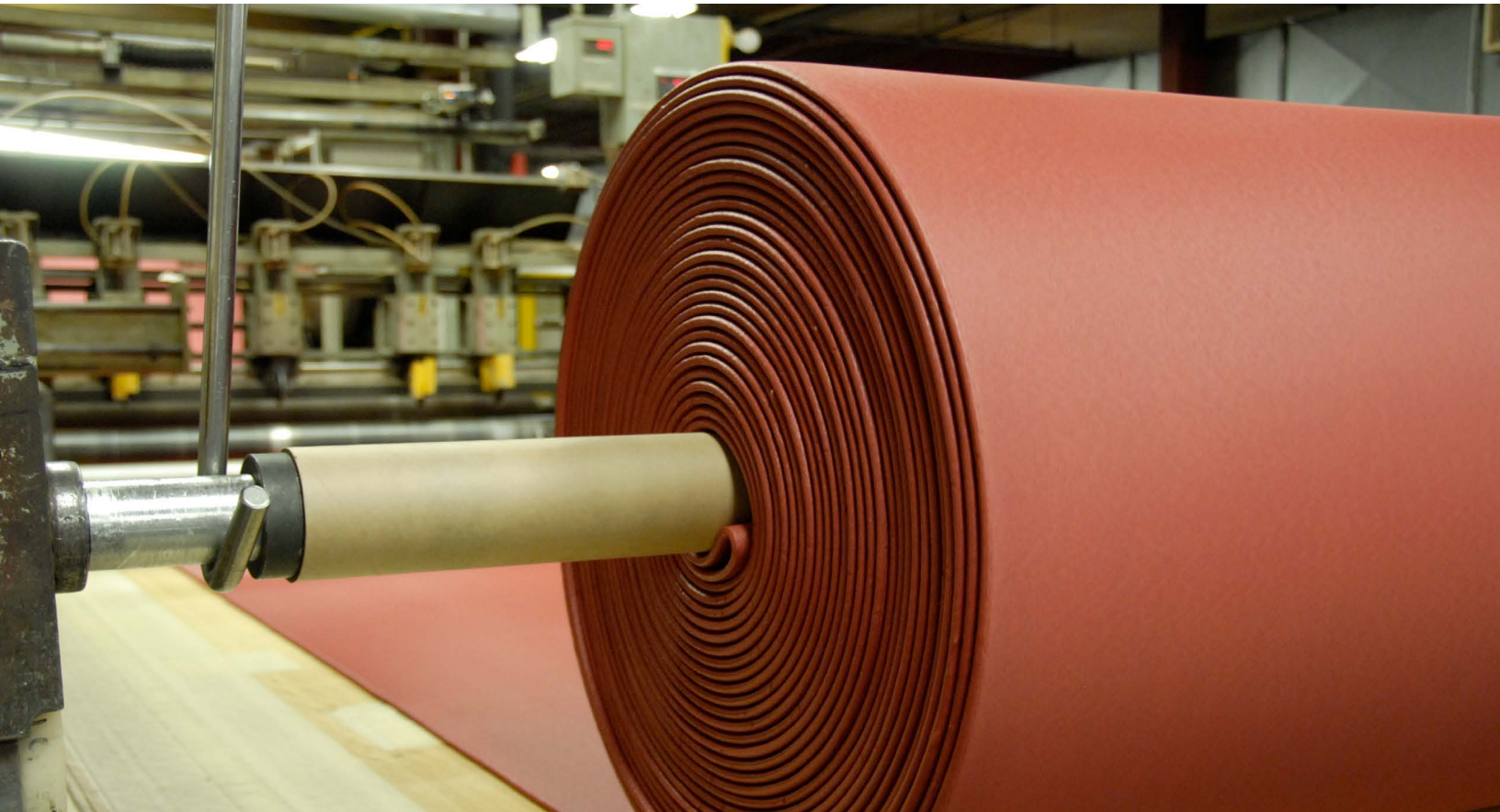


Decorative

Rogers Griswold and Avery Dennison Adhesive Sample Preparation

Avery Dennison adhesive products were backed with a 2 mil PET film and trimmed to a one-inch width. Two sample sets were laminated to Rogers Griswold cellular rubber materials.

| Set | Description |
|-----|---|
| 1 | Laminated at room temperature. 30% compression, 20 psi, 20 fpm, 72 hr recovery after lamination. |
| 2 | Laminated at 220°F, 30% compression, 20 psi, 20 fpm, 72 hr recovery at room temperature after lamination. |



Rogers Griswold and Avery Dennison Adhesive Sample Testing

Rubber bonding is affected by the rubber's base polymer, thickness, and cell type. Adhesion to rubber is impacted by factors such as: adhesive mass, pressure, compression, lamination speed and temperature. All samples were tested at 180° Peel Adhesion at 12 in/min. It was determined by this study that heat lamination is beneficial (220°F).

| Rogers Griswold Neoprene | Avery Dennison Adhesive Families | Avery Dennison Product Numbers | Performance with Rogers Griswold Materials |
|--------------------------|-------------------------------------|--------------------------------|--|
| • 6110 Black Neoprene | ● High Shear General Purpose Rubber | FT 8345 | Better |
| • 6130 Black Neoprene | ● High Performance Low VOC | FT 1149 X | Best |
| | ● LSE Modified Acrylic | FT 1943 PP | Best |

| Rogers Griswold Sponge Rubber | Avery Dennison Adhesive Families | Avery Dennison Product Numbers | Performance with Rogers Griswold Materials |
|-------------------------------|-------------------------------------|--------------------------------|--|
| • 9230 Red Sponge Rubber | ● Pure Acrylic | FT 1115 | Good |
| | ● Low VOC Acrylic | FBA 1118 GL | Better |
| • 3150 Black Sponge Rubber | ● General Purpose Acrylic | FT 1126 | Better |
| | ● High Shear General Purpose Rubber | FT 8345 | Better |
| • 3110 Black Sponge Rubber | ● High Performance Low VOC | FT 1149 X | Best |
| | ● LSE Modified Acrylic | FT 1943 PP | Best |

| Rogers Griswold Backed Sponge Rubber | Avery Dennison Adhesive Families | Avery Dennison Product Numbers | Performance with Rogers Griswold Materials |
|---|-------------------------------------|--------------------------------|--|
| • 3120 Black Sponge Rubber with F640 GRC700 | ● General Purpose Acrylic | FBA 8960 | Good |
| | ● Pure Acrylic | FBA 1115 | Better |
| | ● Low VOC Acrylic | FBA 1118 GL | Better |
| | ● General Purpose Acrylic | FT 1126 | Better |
| | ● High Shear General Purpose Rubber | FT 8345 | Better |
| • 3120 Black Sponge Rubber with F549 Tissue | ● High Performance Low VOC | FT 1149 X | Best |
| | ● LSE Modified Acrylic | FT 1943 PP | Best |

Good = Likely to achieve rubber tear with heated lamination.
Better = May achieve rubber tear without heat lamination.
Best = Likely to achieve rubber tear at room temperature.

For more information about Rogers Griswold cellular rubber products visit, rogerscorp.com/elastomeric-material-solutions/griswold-rubber/griswold-cellular-rubber.

To identify the Avery Dennison Core Series adhesive ideal for your application, please refer to the Core Series Product Selection Tool. Using the Core Series' simple four-step adhesive selection process, you will be able to find the product that best suits your needs. The Core Series Product Selection Tool is available at tapes.averydennison.com/coreseries.

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