

3M[™] Wire Harness Tape 5078 and 5078RV

Technical Data Sheet



Description

3M[™] Wire Harness Tape 5078 is a double-sided acrylic foam sealing tape with excellent initial adhesion, heat resistance and durability compared to conventional butyl sealing tape. Common uses include bonding to rough or highly irregular surfaces, sealing and other applications where a highly conformable tape is required. 3M Wire Harness Tape 5078 has been developed using the technology of 3M[™] Acrylic Foam Tape, which has been used for vehicle interior and exterior part attachment for more than forty years.

3M Wire Harness Tape 5078 offers the following features, advantages, and benefits:

- Demonstrates excellent initial adhesion and static performance against substrates that have uneven surfaces
- Can be applied to many substrates used for automotive parts, often without special surface treatment
- Exhibits good workability due to high tape modulus, ease of cutting and wet-out
- Helps reduce the possibility of staining the bonded surfaces because it is made of a high molecular weight acrylic material
- Excels in extreme weather, heat, and solvent resistance

3M Wire Harness Tape 5078 is also available as 3M[™] Wire Harness Tape 5078RV, which contains a scrim close to the yellow paper liner

Applications

3M Wire Harness Tape 5078 is used in the attachment of wire harness assemblies to automobile headliners, attaching interior trim, bonding impact relaxation pads to door panels, bonding of cellular urethane, polystyrene and polypropylene parts and similar applications.

Product Construction

| 5078 | Yellow paper liner ——— | |
|--------|--|--|
| | Pressure sensitive acrylic foam adhesive ——— | |
| | Scrim | |
| 5078RV | Yellow paper liner ——— | |
| | Scrim ———— Pressure sensitive acrylic foam adhesive ——— | |

Physical Properties

| 5078 and 5078RV | | |
|-----------------|------------------|--|
| Color | Black | |
| Thickness | 1.0 mm (0.04 in) | |

Typical Performance Characteristics

Performance tests are run using standard test procedures in 3M laboratories. These values presented are typical and not to be used for specification purposes. Peel values depend on test conditions and substrates.

| 90° Peel Strength | | | | | | | |
|--|-------------|--------------------|------------|---|--|--|--|
| Test Conditions | Temperature | 5078/5078RV (N/cm) | Butyl Tape | † | | | |
| Immediate state 30 seconds | 5°C | 11.8 | 4.9 | Anodized Aluminum Foil 1145-OSB (Lawrence & Frederick Inc.) | | | |
| after tape lamination. Adhesion to painted steel. | 23°C | 16.8 | 7.8 | | | | |
| Auresion to painted steel. | 40°C | 16.8 | 7.8 | Acrylic Foam Tape | | | |
| Static Shear | | | | | | | |
| Test Conditions | Temperature | 5078/5078RV (N/cm) | Butyl Tape | | | | |
| 10 mm wide x 25 mm tape | 23°C | 400.0 | 100.0 | Test Substrate | | | |
| sample size. EPDM is applied | 40°C | 300.0 | 50.0 | | | | |
| to painted steel and exposed to the tested temperature for | 60°C | 200.0 | 10.0 | Alu — | | | |
| 24 hours. | 80°C | 100.0 | 0.0 | | | | |

Shelf Life

One year from the date of receipt by customer 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

To obtain published IMDS ID numbers, email requests to <u>3M-IMDSrequest@mmm.com</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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