

# 3M™ Acrylic Plus Tape Series EX4000

## Technical Data Sheet



### Product Description

EX4000 is a 3M™ Acrylic Plus Adhesive Tape based on a black acrylic foam for use on difficult to bond automobile surfaces (e.g., powder coatings, nanoparticle-containing clearcoats, PP/EPDM, etc). The adhesive tape is suitable for fastening plastic attachments under medium load (such as strips, body side moldings, etc.) to the body or door.

### Product Features

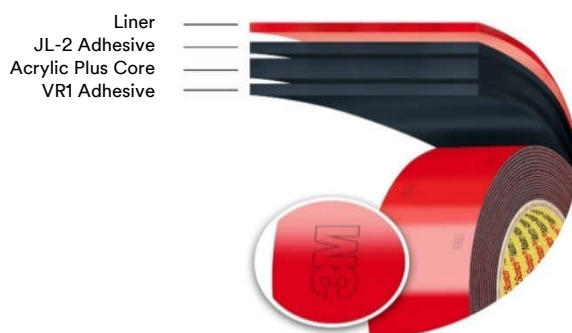
- Outstanding adhesion to many automotive paints and MSE (Medium surface energy) plastics.
- Operating temperature up to 90°C.
- Optimized acrylate foam core for easy application and good adaptation to component surfaces.
- Temperature, weather, UV and solvent resistant.
- Suitable for all manual and automatic application processes.

### Advantages

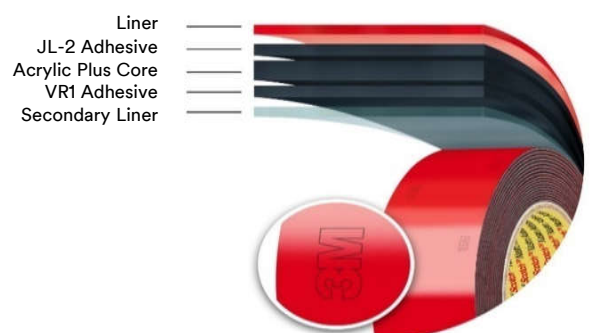
- 3M™ Acrylic Foam Adhesive Tapes can compensate stress due to their unique viscoelasticity. In contrast to foam adhesive tapes (PE, PU adhesive tapes), they can cope with significant elongation differences between substrates in case of temperature changes.
- Easy to use: The tape can be easily processed in multiple ways to cut and to apply.
- Immediate initial adhesion: The initial adhesion allows immediate further processing without temporary support or fixtures.
- Freedom of design: enables the easy differentiation of vehicle models through modified trim attachments without change of the body configuration.
- Sealing and damping properties: positive improvement of NVH properties.

### Product Construction

EX4000F



EX4000T



## Physical Properties

Typical Values	EX4008	EX4011	EX4015
Thickness	0.8 mm	1.1 mm	1.5 mm
90° Peel on 3M Reference Stainless Steel plates (Specification values have to be determined on customer substrate)			
20 min RT Liner Side (LS)	39 N/cm	44 N/cm	47 N/cm
20 min RT Non-Liner Side (NLS)	25 N/cm	28 N/cm	31 N/cm
Density	633 kg/m <sup>3</sup>		
Core	3M™ Acrylic Plus Tape		
Color	Black		
Liner	<p>F: Red branded polyethylene foil, both sides siliconized. Tabbing method undercut.</p> <p>T: Version with one side siliconized red polyethylene foil, good for tabbing tape bonding and an additional, one side siliconized transparent polyethylene liner, to be removed before application.</p> <p>This liner is available for die cuts, level wound rolls and planetary rolls from 100 mm width upwards.</p>		
Adhesive Liner Side (LS) and Non-Liner Side (NLS)	<p>Liner Side (LS): JL2 high performance adhesive with high initial and final tack for advanced automotive coating systems and low energy surfaces.</p> <p>Non-Liner Side (NLS): VR1 adhesive with very high initial and final tack.</p>		
Shelf Life	<p><u>Film liner</u></p> <p>Duration: 24 month from date of manufacturing</p> <p>Conditions: 4 °C - 38 °C and 0 - 95 % RH in original unopened packaging – optimum: 23 °C ± 2 °C and 50% ± 4 % RH</p> <p><u>Levelwound rolls</u> to be stored horizontally.</p>		
Temperature Resistance	-40°C to +90°C, short term 120°C (both values are load-dependent).		
Tabbing	<p>An extended liner tab is recommended.</p> <p>Tape available with tabbable liner option: 3M™ Acrylic Plus Tape EX4000T Series.</p> <p>PSA Tabbing: 3M™ Tabbing Tape 5699 for siliconized liners (test first) 3M™ Tabbing Tape 5300 for non-siliconized liners.</p> <p>Heat-bond tabbing: 3M™ Tabbing Tapes 5081 and 5082 for silicone liners.</p>		
Splices	<p>Number of splices depends on order quantity and roll length.</p> <p>Level-wound rolls have 3-4 splices on average. Smaller order quantities (less than 400 m<sup>2</sup>) rolls could contain a significantly different number of splices.</p>		
Regulatory Information	<p>Please refer to the product label and Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the SDS, which is available on request or use <a href="http://www.3M.com/msds">www.3M.com/msds</a>. The product is published as material entry and is available for access on <a href="http://www.mdsystem.com">www.mdsystem.com</a>. For Product IMDS ID Number, email requests to 3M-IMDSrequest@mmm.com. (In Germany use <a href="mailto:ge-produktsicherheit@mmm.com">ge-produktsicherheit@mmm.com</a>).</p>		
IMDS	<a href="http://www.mdsystem.com/imdsnt/startpage/index.jsp">http://www.mdsystem.com/imdsnt/startpage/index.jsp</a>		

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Revision 02

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Supersedes former versions.