

3M™ Acrylic Foam Tape 4205

Technical Data Sheet

Product Description

4205 is a 3M™ Acrylic Foam Tape consisting of a white foamed acrylic foam core with additional acrylate adhesives on both sides. Typical applications are attachments of elastomeric add-on-parts such as sealings at car body or door.

4205 demonstrates a very good adhesion to many automotive surfaces, good inner strength, excellent long term stability as well as a very good adaptability to the areas adhered to. In combination with adhesion promoter, the tape achieves a good plasticiser resistance and assures a good adhesion to elastomeric add-on-parts. Based on the unique viscoelastic properties of the 4205, stress is decreased in the adhesive bond line so that durable bonds are formed.

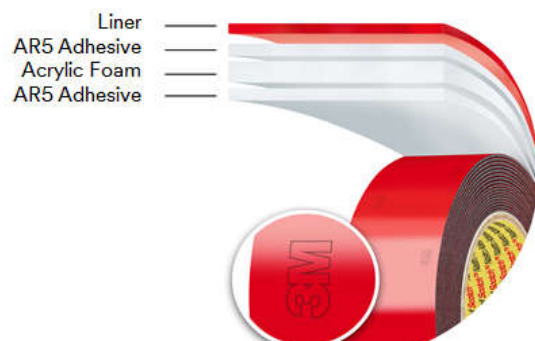
Product Features

- Good adhesion to many automotive paints.
- 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.
- Good initial adhesion: The initial adhesion allows immediate further processing often 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



Physical Properties

Typical Values	4205
Thickness	1.1 mm
90° Peel on 3M Reference Stainless Steel plates (Specification values have to be determined on customer substrate)	
20 min RT	34 N/cm
72 h RT	43 N/cm
Density	745 kg/m ³
Core	3M™ Acrylic Foam Tape
Color	White
Liner	F: Red polyethylene foil.
Adhesive Liner Side (LS) and Non-Liner Side (NLS)	AR5: Adhesive with high initial and final adhesion to various paint systems and surfaces, ie. MSE Substrates like ABS. *MSE=medium surface energy.
Shelf Life	<u>Film liner</u> Duration: 36 month from date of manufacturing Conditions: 4 °C - 38 °C and 0 - 95 % RH in original unopened packaging – optimum: 23 °C ± 2 °C and 50% ± 4 % RH <u>Levelwound rolls</u> to be stored horizontally.
Temperature Resistance	-40°C to +90°C, short term 120°C (both values are load-dependent).
Tabbing	An extended liner tab is recommended. 3M™ Heat-bonding tabbing 5081 - 5082.
Splices	Number of splices depends on order quantity and roll length. Level-wound rolls have 3-4 splices on average. Smaller order quantities (less than 400 m ²) rolls could contain a significantly different number of splices.
Regulatory Information	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 www.3M.com/msds . The product is published as material entry and is available for access on www.mdssystem.com . For Product IMDS ID Number, email requests to 3M-IMDSrequest@mmm.com . (In Germany use ge-produktsicherheit@mmm.com).
IMDS	http://www.mdssystem.com/imdsnt/startpage/index.jsp

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Revision 08

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