



Automotive Technical Data Sheet

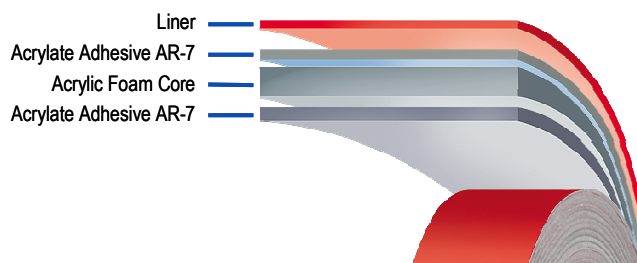
3M™ Acrylic Foam Tape

5390

Description

5390 is a 3M™ Acrylic Foam Tape consisting of a light grey acrylic foam core with additional acrylate adhesives on both sides. Typical applications are attachments of exterior add-on-parts such as body side moldings, trims or emblems, etc. 5390 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. Based on the unique viscoelastic properties of the 5390, stress is decreased in the adhesive bond line so that durable bondings are formed.

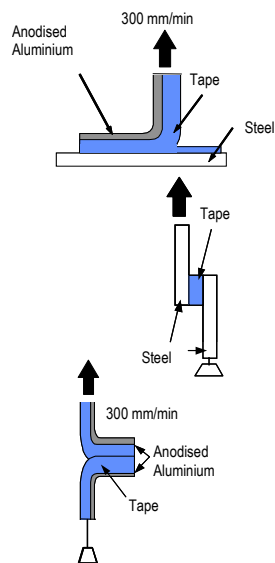
Construction



General Properties		
Core	Viscoelastic Acrylic Foam, density (675 kg/m ³)	
Colour	Light grey	
Thickness (without liner)	2.3 mm + / - 0.15 mm	
Width Tolerance	+ / - 0.4 mm	
Liner	F – red polyethylene foil	
Adhesive to paint or plastics (liner side)	AR-7 acrylate adhesive with high initial and final tack to paints or ABS	
Adhesive to paint or plastics (non-liner side)	AR-7 acrylate adhesive with high initial and final tack to paints or ABS	
Mass per unit area (approx.)	Type	5390
	Tape	1.58 kg/m ²
	Liner	0.11 kg/m ²
Shelf life	Following shelf life when stored in unopened original cartons at +4°C to +38°C and 0 - 95 % relative humidity is considered from date of delivery: - Products with non -siliconized polyethylene liner 24 months - Products with siliconized polyethylene- and paper liner 12 months Level wound rolls must be stored under lay flat conditions.	
Heat resistance	- 40°C to + 90°C, short term 120°C (both values are load-dependent)	
Splices	Number of splices depends on order quantity and roll-length. Level wound rolls have 3 to 4 splices in average. Smaller order quantities (smaller than one jumbo) rolls could contain up to 14 splices.	
IMDS Nr.	http://www.mdssystem.de	

Performance Properties (typical Values)

Performance tests are run using standard test procedures. The values presented are typical values not to be used for specification purposes.



Tests	Results
90° peel adhesion on polished steel 3M TMG 1637 20 minutes at RT 72 hours at RT	Both sides of the tape: 32 N/cm 43 N/cm
Static Shear Adhesion 3M TMG 1266 The static shear test is carried out with a bonded area of 25.4 mm by 12.7 mm wide tape. 6.8 kg roll-down against polished steel	Exceeds more than 10,000 minutes at 90°C Weight: 500 grams
Alu T- Peel 3M TMG 1636	34 N/cm

Characteristics of Acrylic Foam Tape

The Acrylic Foam Tape is manufactured using a special 3M process of producing a homogeneous system of high performance acrylic adhesive.

The product can be used for numerous applications both on the exterior and interior of vehicles.

The unique viscoelastic nature of acrylic foam gives it a high cohesive strength combined with excellent shock and weathering resistance.

Generally the adhesion increases with time, resulting in a durable, high performance bond between the part and the substrate. To optimize bond strength, the surfaces must be clean, dry and smooth with good fit between part and substrate. Decisive for good adhesion performance is full surface contact between tape and substrate.

Contact is achieved by pressurisation. In practice a pressure between 10 and 50 N/cm² is usually needed and an application temperature between 18 and 40 °C is also necessary. During application, add-on parts and tapes must have the same temperature.

Additional Information

This data sheet contains specific information about the product. General characteristics and application rules of acrylic foam tapes are available separately.

Important notice

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use.

All questions of liability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.

