Automotive Technical Datasheet

3M[™] Acrylic Foam Tape

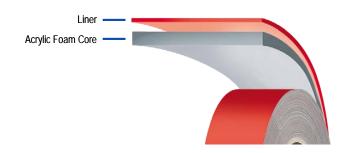
GT 6012

Description

GT6012 is a 3M[™] Acrylic Foam Tape of gray foamed acrylic adhesive.

Typical applications are attachments of exterior add-on-parts such as body side moldings, trims or emblems/inserts. GT6012 demonstrates a 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 the unique viscoelastic property of GT6012, stress is relaxed in the adhesive bond line so that durable bonds are formed.

Construction



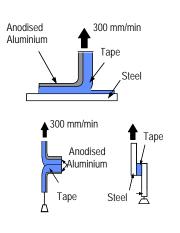
General Properties			
Core	Viscoelastic Acrylic Foam, density (700 kg/m ³)		
Colour	Grey		
Thickness (without liner)	1.2 mm + / - 0.1 mm		
Width tolerance	+ / - 0.4 mm		
Liner	F - red polyethylene foil P - white, both sides siliconized paper liner for die cuts; not suitable for lathe slitting		
Mass per unit	Туре	GT 6012 F	GT 6012 P
	Таре	0.84 kg/m²	0.84 kg/m²
	Liner	0.11 kg/m ²	0.09 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: Planetary rolls with polyethylene films 24 months Planetary rolls with siliconized paper liner 12 months Level wound rolls and die-cuts 12 months 		
Heat resistance	- 40°C to + 120°C, short term 160°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 No.	5923422		





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.



Test	Results of both tape sides	
90 ° steel adhesion on polished steel		
3M TMG 1637		
20 minutes at RT	25 N/cm	
72 hours at RT	30 N/cm	
Static Shear Adhesion		
3M TMG 1266	Exceeds more than 10,000 minutes	
The static shear test is carried out with	at 90°C	
bonded area of 25.4 mm by 12.7 mm wide tape.	Weight: 500 grams	
6.8 kg roll-down against polished steel		
Alu T- Peel	23 N/cm	
3M TMG 1636		

Characteristics of Acrylic Foam Tape

The Acrylic Foam Tape is manufactured using a special 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 pressurization. In practice a pressure between 10 - 50 N/cm² is usually needed and an application temperature between 18 - 40 °C is also necessary.

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.



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