



Automotive Technical Data Sheet

3M™ Acrylic Plus Tape

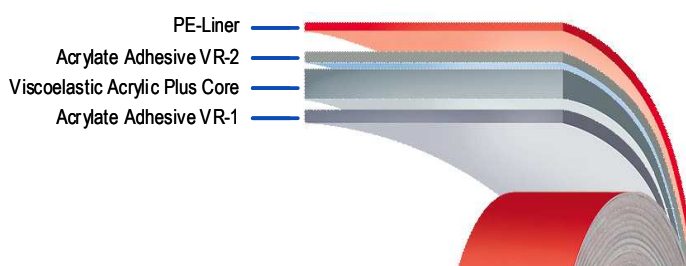
PT1100

Description

PT1100 is a 3M™ Acrylic Plus Tape black foamed acrylic adhesive with additional acrylic adhesive on both sides. Typical applications are attachments of rigid add-on-parts such as spoiler, rocker panel, antenna housings, roof ditch moldings and wheel arch extensions, etc., where an aesthetic bond line is required.

PT1100 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. Due to the unique viscoelastic nature of PT 1100 stress is dissipated in the tape this results in formation of durable bonds.

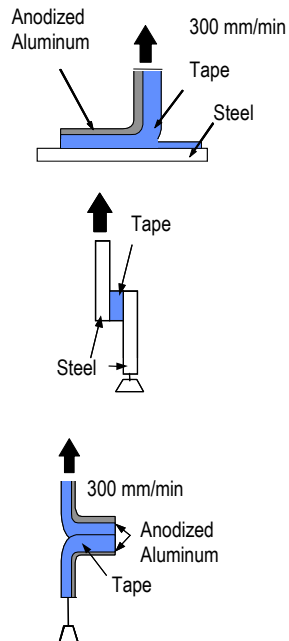
Construction



General Properties			
Core	Viscoelastic Acrylic Plus Foam, density (550 kg/m ³)		
Color	Black		
Thickness (Without Liner)	1.1 mm + / - 0.1 mm		
Width Tolerance	+ / -0.4 mm		
Liner	F - Red polyethylene foil, both sides siliconized 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. This liner is available for die cuts, level wound rolls and planetary rolls from 100 mm width upwards.		
Adhesive to Paint (Liner Side)	VR-2 acrylic adhesive with very high initial and final tack to paint.		
Adhesive to Add-on Part (Non-liner Side)	VR-1 acrylic adhesive with very high initial and final tack.		
Mass per unit area (approx.)	Type	PT 1100 F	PT1100 T
	Tape	0.62 kg/m ²	0.62 kg/m ²
	Liner	0.11 kg/m ²	0.16 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.mdsystem.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.



Test	Result	
90° peel adhesion on polished steel 3M TMG 1637 20 minutes at RT 72 hours at RT	VR-1 Side: 44 N/cm 44 N/cm	VR-2 Side: 44 N/cm 44 N/cm
90° peel adhesion on 1c clear coat 3M TMG 1637 20 minutes at RT 72 hours at RT	VR-1 Side: 42 N/cm 42 N/cm	VR-2 Side: 42 N/cm 42 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 g.	
Alu T- Peel 3M TMG 1636	29 N/cm	

Characteristics of Acrylic Plus Tape

The Acrylic Foam Tape is manufactured using a special process that yields 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 results in high cohesive strength, combined with excellent shock and weathering resistance. 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. During application, add-on parts and tapes must have the same temperature.

If you bond to substrates which contain plasticizer (i.e. EPDM, PVC), please check plasticizer-resistance of each individual application to ensure that the tape is suitable for this application.

Additional Information

This data sheet contains specific information about the product. General characteristics and application rules of acrylic plus 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.

