

## Action Tape 1009 Direct Foam <u>Product Information 01.2021</u>

## Action Tape 1009

This product is a double sided high performance acrylic based adhesive tape, which is especially designed for a variety of materials with high surface energy like glass, aluminum and steel. This tape is capable of absorbing the different thermal expansions of two materials. Because of their high density, this tape offers, when used on the right high surface energy substrates, the strongest available bond. This acrylic foam tape has a very high temperature resistance In combination with a primer, this Action Tape family guarantees excellent adhesion performance even on low surface energy substrates.

$\frac{\text{Liner:}}{\text{Temperature Resistance:}} \qquad $	Red PE liner —	_				
Core:Closed cell acrylicAdhesive:Closed cell acrylicDensity:880 kg/m² [54lb/fl²]Core:WhiteRed PE liner or Siliconised PLiner:linerUner:Temperature Resistance:Minimum-40°C (-40°F)Short term190°C (374°F)Long term120°C (248°F)90° Peel AdhesionN/10mmIlb/mi38 (22)AstM D3330Suitable for:- gloss, gloss/epoxy, stainless steel, galvanizedstrengthIb/m²StrengthKPa(b/in?)590 (86)AstM D-1002Static Shear $\frac{kPa}{(b/in?)}$ Static Shear $\frac{22°C (72°F)}{(b/in?)}$ Static Shear $\frac{22°C (72°F)}{250}$ Static Shear $\frac{22°C (72°F)}{250}$ Static Shear $\frac{22°C (72°F)}{250}$ Static Shear $27000000000000000000000000000000000000$	Selfstick		5	Thickness:		1,2 mm (0.047 inch) ±10%
Density:         880 kg/m³ (54b/f³)           Color:         White Red PE liner or Siliconised P           Liner:         Illner           Temperature Resistance:         Minimum           Minimum         -40°C (-440°F)           Short term         190° C (374°F)           Long term         120°C (248°F)           Strength         (b/m²)           Strength         (b/m²)           Strength         S90 (86)           ASTM D-1002         ASTM D-1002           Normal Tensile         KPa (b/m²)           g/312mm²         66°C (15°F)           Stength         >10,000 min.           20°C (220°F)         250           Static Shear Strength         >10,000 min.           g/312mm²         22°C (72°F)           121°C (250°F)         250           250         ASTM 3654	Sensier			Core:		Closed cell acrylic
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Strength       (lb/in <sup>2</sup> ) $390(66)$ ASIM D=1002         Normal Tensile $kPa$ Asim D=1002       Available sizes:         Normal Tensile $kPa$ $590(86)$ ASTM D=897       Automatical conditions and the size size in the size size size in the size size size in the size size in the size size size in the size size size size in the size size size size size size size siz	Dum anaia Chia an	LD -				
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Normal Tensile $kPa$ (lb/in <sup>2</sup> ) $590 (86)$ ASTM D-897         - log: 900mm x 33/66 m (76,2mm core) - slit roll: 4 – 250mm x 33/66 m (76,2mm core) - spool roll: 5 – 25mm x max 900 m (152,4mm core) - spool roll: 5						
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Static Shear Strength     g/312mm <sup>2</sup> 66°C (150°F)     250       93°C (200°F)     250     ASTM 3654       121°C (250°F)     177°C (350°F)		kD a			- log: 900mm x 3	3/66 m (76,2mm core)
Static Shear Strength         g/312mm²         66°C (150°F)         250           > 10,000 min.         93°C (200°F)         250         ASTM 3654           (7 days)         121°C (250°F)         177°C (350°F)	Normal Tensile		590 (86)	ASTM D-897	- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
Static Shear Strength         g/312mm²         66°C (150°F)         250           > 10,000 min.         93°C (200°F)         250         ASTM 3654           (7 days)         121°C (250°F)         177°C (350°F)	Normal Tensile		590 (86)	ASTM D-897	- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
Static shear         > 10,000 min.         93°C (200°F)         250         ASTM 3654           Strength         (7 days)         121°C (250°F)         177°C (350°F)	Normal Tensile			ASTM D-897	- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
Strength         (7 days)         121°C (250°F)           177°C (350°F)         177°C (350°F)	Normal Tensile	(Ib/in²)	22°C (72°F) 1000	ASTM D-897	- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
177°C (350°F)	Static Shear	(lb/in²) g/312mm²	22°C (72°F) 1000 66°C (150°F) 250		- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
	Static Shear	(lb/in²) g/312mm² > 10,000 min.	22°C (72°F) 1000 66°C (150°F) 250 93°C (200°F) 250		- log: 900mm x 3 - slit roll: 4 – 250r	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core)
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	Static Shear Strength	(lb/in²) g/312mm² > 10,000 min. (7 days)	22°C (72°F) 1000 66°C (150°F) 250 93°C (200°F) 250 121°C (250°F) 177°C (350°F)		- log: 900mm x 3 - slit roll: 4 – 250r - spool roll: 5 – 2	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core) 5mm x max 900 m (152,4mm core
	Static Shear Strength	(lb/in²) g/312mm² > 10,000 min. (7 days)	22°C (72°F) 1000 66°C (150°F) 250 93°C (200°F) 250 121°C (250°F) 177°C (350°F)	ASTM 3654	- log: 900mm x 3 - slit roll: 4 – 250r - spool roll: 5 – 2	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core) 5mm x max 900 m (152,4mm core
	Static Shear Strength	(Ib/in <sup>2</sup> ) g/312mm <sup>2</sup> > 10,000 min. (7 days)	22°C (72°F) 1000 66°C (150°F) 250 93°C (200°F) 250 121°C (250°F) 177°C (350°F)	ASTM 3654	- log: 900mm x 3 - slit roll: 4 – 250r - spool roll: 5 – 2	3/66 m (76,2mm core) nm x 33/66 m (76,2mm core) 5mm x max 900 m (152,4mm core



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Surface	Tape bonding is one of the most variable and easy technologies mating substrates. Especially for assemblies made of different substrates having different thermal expansion rates. Bonding is an easy method for a long term joint. CCP tapes allow a high variation in such substrates as all are available in different thicknesses. To ensure proper performance of such bonded parts, see the following recommendations.
Design	A proper tape bond design means avoiding cleavage and peel forces. Design leading to pure shear and tensile loads have to be preferred to utilize full CCP Action Tape performance.
Surface Preparation	All bonding processes require proper surface preparation and cleaning. This will enable CCP Action Tapes to get in direct contact with the surface creating full adhesion force. CCP Action Clean Dirt & Dust will remove most (polar) contaminations such as fingerptints and light oil. CCP Action Clean Oil & Grease is used for more non-polar contaminations as grease mold release agents. Check suitable cleaner with surface test inks. Use lint-free tissues for such operations.
Surface Modification	If simple cleaning cannot achieve appropriate adhesion forces the following surface modifications can be used. For larger scale process operations, the use of e.g. flame activation can be used. On smaller scale repair operations, the use of CCP Action Prime or CCP Action Activate might be a solution. CCP Action Prime 10 (UV) is used for plastics or similar coatings which have a low surface energy. For glass, CCP Action Prime 201 is used when exposed to humid environments. CCP Action Activate 301 is a solution used for a variety of car paints. All primer/activators should only be used on the area for bonding. Excess material needs to be cleaned immediately. For mill finished aluminum or stainless steel, CCP Action Pads can be used to create light abrasions followed up by cleaning with CCP Action Clean Dirt & Dust.
Temperature	After proper surface preparation, CCP Action Tapes should be applied at a temperature level above 65° F (18° C). For temperatures below this but above 32° F, use CCP low temperature Action Tapes.
Pressure	Ensure immediate part assembly after linear removal. Pressure should be applied in rolling fashion at approximately 10N/cm2. Recommended roller speed at 24 in/s (10 mm/s). Higher v speeds might require higher pressure or control with surface pressure films. CCP Action Tapes reach full strength after 24 hours at ambient temperature. Higher temperatures can accelerate strength development.
Storage & Shelf Life	Store CCP Action Tapes between 40°-95° F (5°-35° C). Humid conditions should be avoided. For products with non-siliconized liners, shelf life is 24 months; products with siliconized liners and CCP splice/tabbing have a shelf life of 12 months.
Disclaimer	All technical data in this data sheet are based on CCP's experience and external testing. These values are representative for the overall performance. These data sheets are NOT to be used for specification purposes or for your own specific application. It is your responsibility to test whether the tape is suitable for your application or project. CCP will not be held liable for any information provided on this data sheet. Please follow the rules and regulations that are applicable in the state, county or country where CCP products are being used. If you have any questions regarding the use of the CCP Action Tape acrylic foam tapes, please contact your sales rep. Please review all documents that should have been agreed to in writing prior to the sale between CCP and the customer. Action Tape is a brand name of CCP.