

# Acrylic Foam Tape

(Standard type : #4216, #4215, #5312, #4212, #4213, #4211, #5357)

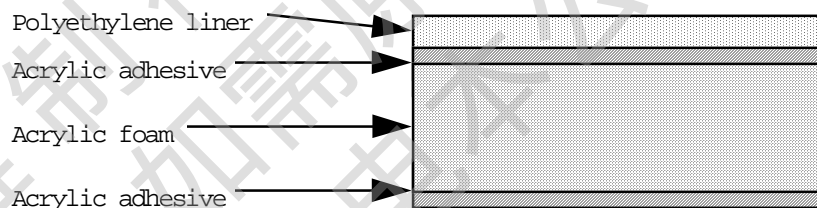
## General Information :

The Acrylic Foam Tape which is made by the special process has a superior adhesion performance and good flexibility. It has been used for several actual auto parts attachments for more than ten years, and the high credibility has been well acknowledged in the automotive market .

## Features :

- Shows a high initial adhesion strength, an enough tape wet-out area and has a superior workability.
- Provides a very high final adhesion and peeling strength.
- Excels in a variety of weather, solvent and high temperature resistance.
- Follows the shrinkage and elongation of the plastic part caused by the temperature change, and has good stress relaxation properties which are very important for the automotive parts attachments.

## Configuration :



## Tapes :

Tape No.	Tape		Liner	
	Thickness (mm)	Color	Color	Material
#4216	0.2	Gray	White	Polyethylene
#4215	0.4			
#5312	0.6		Red	
#4212	0.8		White	
#4213	0.8		Red	
#4211	1.2			
#5357	1.6			

## Usage :

Body side molding, Bumper molding, Roof molding, Window molding, Emblem, Door edge molding, Pad protector, Mud guard, Big side protector, Side visor, etc.

**Test results (Vol. 1) :**

Items		Substrates	#4216	#4215	#5312
Thickness (mm)			0.2	0.4	0.6
180 Peeling Strength N/25mm (kgf/25mm)	Initial state	Painted panel	17.6 (1.8)	19.6 (2.0)	21.6 (2.2)
		PVC panel	26.5 (2.7)	29.4 (3.0)	32.3 (3.3)
	Normal state	Painted panel	20.6 (2.1)	25.5 (2.6)	28.4 (2.9)
		PVC panel	29.4 (3.0)	32.3 (3.3)	34.3 (3.6)
	At high temperature	Painted panel	12.7 (1.3)	15.7 (1.6)	18.6 (1.9)
		PVC panel	13.7 (1.4)	15.7 (1.6)	18.6 (1.9)
	Heat aging	Painted panel	31.4 (3.2)	36.3 (3.7)	40.2 (4.1)
		PVC panel	9.8 (1.0)	20.6 (2.1)	26.5 (2.7)
	Warm water immersion	Painted panel	24.5 (2.5)	30.4 (3.1)	34.3 (3.5)
		PVC panel	22.5 (2.3)	27.4 (2.8)	31.4 (3.2)
Shear strength MPa (kgf/c)	Initial state	Painted panel and PVC panel	0.84 (8.6)	0.77 (7.9)	0.74 (7.6)
	Normal state		0.87 (8.9)	0.81 (8.3)	0.76 (7.8)
	At high temperature		0.29 (3.0)	0.25 (2.6)	0.25 (2.6)
	Warm water immersion		0.85 (8.7)	0.78 (8.0)	0.74 (7.6)
	Gasoline immersion		0.86 (8.8)	0.78 (8.0)	0.76 (7.8)
	Wax-remover immersion		0.76 (7.8)	0.71 (7.2)	0.65 (6.6)

Painted panel : White color painted panel used on a vehicle

PVC panel : N200 primer (10 times diluted C100 primer) is applied to the PVC panel.

**Test results (Vol. 2) :**

Items		Substrates	#4212	#4213	#4211	#5357
Thickness (mm)			0.8	0.8	1.2	1.6
180 Peeling Strength N/25mm (kgf/25mm)	Initial state	Painted panel	23.5 (2.4)	23.5 (2.4)	26.5 (2.7)	29.4 (3.0)
		PVC panel	36.3 (3.7)	36.3 (3.7)	42.1 (4.3)	48.0 (4.9)
	Normal state	Painted panel	31.4 (3.2)	31.4 (3.2)	37.2 (3.8)	40.2 (4.1)
		PVC panel	37.2 (3.8)	37.2 (3.8)	43.1 (4.4)	48.0 (4.9)
	At high temperature	Painted panel	19.6 (2.0)	19.6 (2.0)	20.6 (2.1)	21.6 (2.2)
		PVC panel	20.6 (2.1)	20.6 (2.1)	21.6 (2.2)	24.5 (2.6)
	Heat aging	Painted panel	44.1(4.5)	44.1(4.5)	50.0 (5.1)	55.9 (5.7)
		PVC panel	34.3 (3.5)	34.3 (3.5)	41.2 (4.2)	47.0 (4.8)
	Warm water immersion	Painted panel	38.2 (3.9)	38.2 (3.9)	42.1 (4.3)	49.0 (5.0)
		PVC panel	35.3 (3.6)	35.3 (3.6)	41.2 (4.2)	47.0 (4.8)
Shear strength MPa (kgf/c)	Initial state	Painted panel and PVC panel	0.72 (7.3)	0.72 (7.3)	0.63 (6.4)	0.56 (5.7)
	Normal state		0.74 (7.5)	0.74 (7.5)	0.63 (6.4)	0.57 (5.8)
	At high temperature		0.23 (2.3)	0.23 (2.3)	0.21 (2.1)	0.20 (2.0)
	Warm water immersion		0.70 (7.1)	0.70 (7.1)	0.60 (6.1)	0.54 (5.5)
	Gasoline immersion		0.73 (7.4)	0.73 (7.4)	0.62 (6.3)	0.54 (5.5)
	Wax-remover immersion		0.62 (6.3)	0.62 (6.3)	0.55 (5.6)	0.48 (4.9)

Painted panel : White color painted panel used on a vehicle.

PVC panel : N200 primer (10 times diluted C100 primer) is applied to the PVC panel.

### Test methods :

- (1) Thickness : Measured by a dial thickness gauge (in accordance with JIS Z0237)
- (2) 180peel strength : Peel off the tape in 180 direction and measure the adhesion to the substrate with a tensile strength test machine after the exposures in the following conditions.
  - a) Initial state : 23 x 20 min.
  - b) Normal state : 23 x 24 hrs.
  - c) At high temperature : b) at 80
  - d) Heat aging : b) 80 x 336 hrs. b)
  - e) Warm water immersion : b) 40 water x 336 hrs. b)

\* Tape size : 25 mm width, \* Rolling pressure : 5 kg roller one-way, \* Peeling speed : 50 mm/min.
- (3) Shear strength : Measure the strength needed to shear.
  - a),b),c),e) : as same as the conditions of 180peel strength
  - f) Gasoline immersion : b) gasoline x 1 hr. b)
  - g) Wax-remover immersion: b) wax-remover x 1 hr. b)

\* Tape size : 25 mm x 25 mm, \* Rolling pressure : 5 kg roller one-way, \* Tensile speed : 50 mm/min.