Technical Data Sheet

Acrylic Foam Tape RT8000 Series

General Information :

The acrylic Foam Tape RT8000 Series, which is made by a special process, has a superior adhesion performance and high flexibility. This tape is specially designed for exterior and interior parts attachments of automobiles.

The Acrylic Foam Tape can work well on the TOYOTA Anti Acid Paint and Scratch Resistant Paint.

Features :

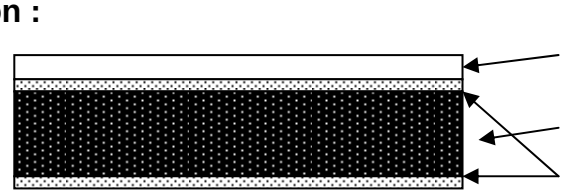
* To the TOYOTA Anti Acid Rain Paint and Scratch Resistant Paint surface
  a) Meets the TOYOTA specification of “The pressure sensitive adhesive double coated tape for exterior parts”, and has a superior initial adhesion performance and durability.
  b) Has the same workability as the standard type on the conventional paint.
  c) Doesn’t detach from the paint surface because of a superior stress relaxation properties.
  d) Still has a superior adhesion performance on the conventional paint surface, and can be used for the same applications as the standard type acrylic foam tape.

*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.

*Provides a very high final adhesion and peeling strength.

*Excels in a variety of weather, solvent and high temperature resistance.

Configuration :



Product line :

Tape No.	Tape		Liner	
	Thickness	Color	Color	Material
RT8002	0.2mm	Gray	Transparent Orange	Polyethylene
RT8004	0.4mm			
RT8006	0.6mm			
RT8008	0.8mm			
RT8010	1.0mm			
RT8012	1.2mm			
RT8016	1.6mm			
RT8020	2.0mm			
RT8025	2.5mm			
RT8030	3.0mm	White		
RT8035	3.5mm			
RT8040	4.0mm			

Usage : Several kinds of parts attachment, i.e. Body side molding, Emblem, Cladding panel, and Spoiler etc.

Test results :

Items		Substrates	RT8008	#5521
Thickness (mm)		-	0.8	
180 Peeling Strength (N/cm)	Initial	AARPP	12.7	12.5
		PVC	17.7	18.2
	Normal state	AARPP	13.8	14.0
		PVC	17.8	18.2
	High temperature	AARPP	5.8	5.3
		PVC	8.9	8.6
	Warm water Deterioration	AARPP	17.0	15.8
		PVC	15.8	16.7
	Thermal Deterioration	AARPP	21.3	20.9
		PVC	16.7	17.0
Share strength (Mpa)	Initial	AARPP / PVC	0.65	0.68
	Normal state	AARPP / PVC	0.68	0.69
	High temperature	AARPP / PVC	0.23	0.20
	Warm water Deterioration	AARPP / PVC	0.45	0.51
	Thermal Deterioration	AARPP / PVC	0.75	0.82
	Immersion in gasoline	AARPP / PVC	0.47	0.45
Stress model test (mm)		AARPP / DP	2.0	1.5

* AARPP : Anti Acid Rain Painted Panel.

* PVC : Polyvinyl Chloride Panel

* DP : Duralumin Panel

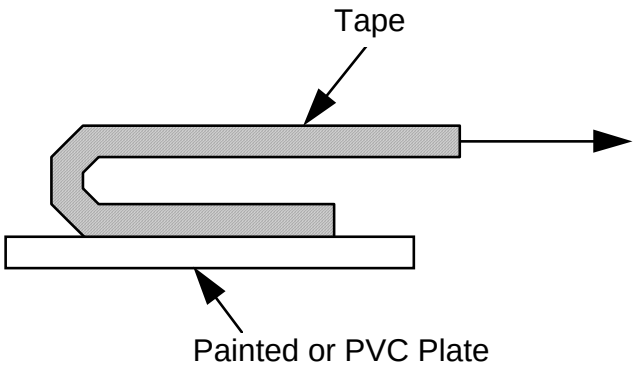
*N200 is applied on the PVC panel and the DP.

<Test methods>

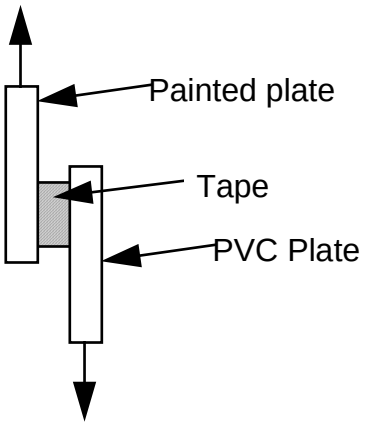
(1) Thickness : Measured by the dial thickness gauge

(2) Adhesion performance : Follow the Toyota engineering standards “pressure sensitive adhesive double coated tape for exterior parts”.

180 peel strength



Shear strength



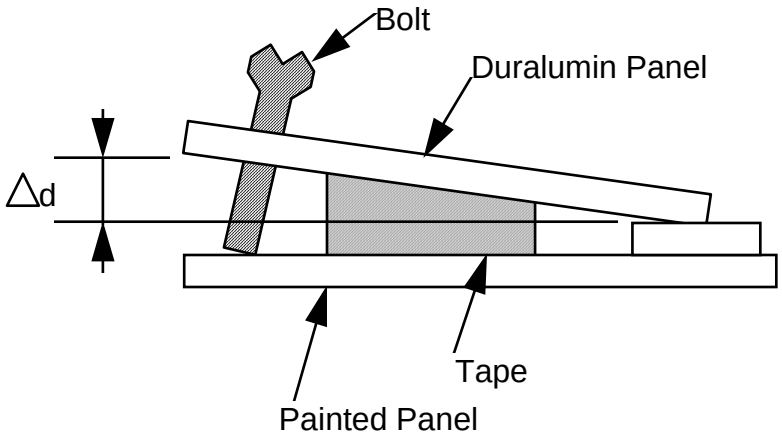
*N200 is applied on the PVC panel.

(3) Stress model test

Substrate : Duralumin panel and Painted panel
Tape size : 10mm x 50mm
Pressurizing : 5 kg roller one way
Temperature : 23 ℃

After the exposure the sample at 23℃ x 24 hours, turn the bolt and add the distance △d.

After the warm water immersion of the sample in the water tank (40℃ x 100 hours), check the tape detachment.



*N200 is applied on the PVC panel and the DP.

Items			RT8002	RT8004	RT8006	RT8008	RT8010	RT8012
Thickness (mm)			0.2	0.4	0.6	0.8	1.0	1.2
180 Peeling Strength (N/cm)	Initial	AARPP	6.3	8.7	10.7	12.7	13.1	13.5
		PVC	13.6	15.0	16.6	17.7	18.3	18.6
	Normal State	AARPP	6.9	9.2	12.1	13.8	14.5	14.7
		PVC	12.8	14.5	16.4	17.8	18.6	18.9
	High Temperature	AARPP	2.7	4.1	5.2	5.8	6.2	6.4
		PVC	5.2	6.7	8.1	8.9	9.0	9.1
	Warm water Deterioration	AARPP	9.7	13.4	16.1	17.0	18.0	19.0
		PVC	5.8	11.3	13.9	15.8	16.4	17.1
	Thermal Deterioration	AARPP	10.5	15.7	19.0	21.3	22.4	22.9
		PVC	5.3	7.1	10.7	16.7	16.8	17.1
Share Strength (MPa)	Initial	AARPP / PVC	0.92	0.87	0.79	0.65	0.61	0.57
	Normal State		0.91	0.89	0.83	0.68	0.63	0.59
	High Temperature		0.22	0.23	0.24	0.23	0.22	0.21
	Warm water Deterioration		0.62	0.58	0.51	0.45	0.42	0.39
	Thermal Deterioration		0.89	0.90	0.80	0.75	0.71	0.66
	Immersion In gasoline		0.66	0.63	0.57	0.47	0.42	0.38

*N200 is applied on the PVC panel.

Items			RT8016	RT8020	RT8025	RT8030	RT8035	RT8040
Thickness (mm)			1.6	2.0	2.5	3.0	3.5	4.0
180 Peeling Strength (N/cm)	Initial	AARPP	14.3	15.0	16.3	17.9	19.4	20.4
		PVC	18.9	19.4	20.2	20.9	21.7	22.3
	Normal State	AARPP	15.9	17.7	19.9	21.6	22.7	23.2
		PVC	18.9	19.4	20.3	20.9	21.7	22.2
	High Temperature	AARPP	6.7	7.0	7.4	7.9	8.2	8.5
		PVC	9.9	10.4	10.6	10.7	10.5	10.6
	Warm water Deterioration	AARPP	20.6	22.0	23.2	23.8	24.5	25.2
		PVC	17.8	18.6	18.9	19.8	20.8	23.6
	Thermal Deterioration	AARPP	23.8	24.5	25.2	25.9	26.8	27.2
		PVC	17.5	17.8	18.9	20.3	22.2	24.0
Share Strength (MPa)	Initial	AARPP / PVC	0.46	0.41	0.36	0.34	0.32	0.32
	Normal State		0.47	0.41	0.36	0.34	0.33	0.32
	High Temperature		0.17	0.14	0.12	0.11	0.10	0.10
	Warm water Deterioration		0.36	0.33	0.31	0.30	0.29	0.29
	Thermal Deterioration		0.56	0.50	0.46	0.44	0.42	0.41
	Immersion In gasoline		0.32	0.28	0.27	0.25	0.24	0.23

*N200 is applied on the PVC panel.