

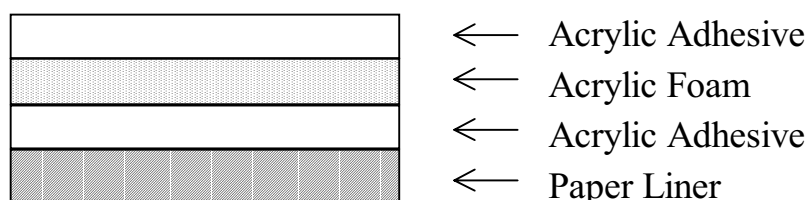
TECHNICAL DATA SHEET

Scotch brand VHB Acrylic Foam Joining Product Y-4914 (0.25mm)

1. Product Description

VHB Acrylic Foam Joining is double coated acrylic foam with acrylic pressure sensitive adhesive on both sides, and has excellent static shear, peel adhesion and resistance to solvents, UV light and elevated temperature. This thin VHB is suitable for reduce a space.

2. Construction



3. Advantages

1. High peel strength
2. Flexible joining
3. Pressure Sensitive type adhesive
4. High seal performance
5. Vibration, Sound, Damping.

4. Application Procedure

1. Clean up oil, water and dust on the bonding surface.
2. Add pressure using press equipment or steel roller.
3. Initial bond strength decreases at less than 10°C. To obtain good Initial adhesion surfaces must be mechanically heated in order to raise the surface temperature above 20°C.

5. Physical property

Products No.		Y-4914
Color		white
Thickness	VHB (mm)	0.25
	paper liner (mm)	0.08
Foam density (g /cm ³)		0.90
Usable temperature range (°C)		-20 ~ 150 °C
Storage Condition		in the room, not expose direct sun light

Test Method

Thickness : Using thickness gauge with caliper foot of 5 mm diameter (JIS Z 0237).

Density : Cut tape specimen 1×3", measure thickness, determine the mass of the specimen. Calculate the density from volume and mass.

Operating temperature range :

At less than - 20°C , impact resistance performance decrease. Degradation of adhesive may be caused for long range using under condition over 150°C.

Storage Condition :

Tape roll may change its appearance when it is exposed in high temperature and humidity for a long time.

6. Property

		Y-4914
90 °C Peel Adhesion (kg / cm)		2.8
T-Peel Adhesion (kg / cm)		1.5
Dynamic Shear Strength (kg / cm ²)	R/T × 72HR	23.9

Test Method

90 ° Peel Adhesion :

Tape between stainless steel and anodized aluminum foil.

Roll down twice in each direction using 10kg steel roller.

72 hours dwell at room temperature.

Testing speed 300 mm/min

T-Peel Adhesion :

Using anodized aluminum foil.

Roll down twice in each direction using 10kg steel roller.

72 hours dwell at room temperature.

Testing speed 300 mm/min

Dynamic Shear Strength:

To stainless steel.

Roll down twice in each direction using 10kg steel roller.

72 hours dwell at room temperature.

Testing speed 300mm/min.

7. Dynamic shear strength at each temperature

		Y-4914
Dynamic Shear Strength (kg / cm ²)	-30℃	29.6
	0℃	30.4
	23℃	23.4
	50℃	10.1
	75℃	5.8
	100℃	4.5
	125℃	2.5

Test Method

To stainless steel. Roll down twice in each direction using 10kg steel roller.

72 hours dwell at room temperature. Test under condition each temperature at 300 mm / min

8. Electric Properties

		Y-4919	Test Method
Insulation resistance	(M Ω)	1.3×10^{13}	JIS C 2130
volume resistivity	(Ω · cm)	4.5×10^{11}	JIS C 2336
dielectric breakdown voltage	(KV / mm)	7.9	JIS C 2110

9. 90℃ Peel Adhesion to each substrate

		Y-4914
90℃ Peel Adhesion (kg / cm)	Stainless Steel (SUS 304 BA)	2.8
	Aluminum (A 1050 P)	1.7
	Galvanized Steel	3.0
	ABS Plate	1.7
	Acrylic Plate	1.4
	FRP	2.6

Important notice to purchaser

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.