Dexerials

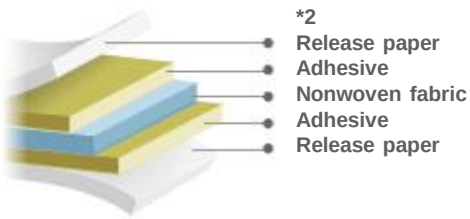
Technical Data Sheet

Impact force resistant type double coated tapes G9200 series

Features

■Adhesive tape with lower environmental impact with UV curable manufacturing method (non solvent adhesive coating process).
■High impact force resistance, and high initial adhesion.
■High adhesion to UV coated
■Ideal for aluminum metalized substrate due to lower corrosion with metal compared with G9100 series.

Structure



Product name	G9200	G9200W *2	G9220
Main component	Acrylic	Acrylic	Acrylic
Carrier	Nonwoven fabric	Nonwoven fabric	Nonwoven fabric
Color	Translucent	Translucent	Translucent
Adhesive thickness (μm)	About 140	About 140	About 200
Release paper thickness (μm)	About 120	About 120＋120	About 120
Bonding strength (N/20mm) *	15	15	15
St'd size (width & length)	500mm × 50m	500mm × 50m	500mm × 50m

* 180° peeling strength
*2 G9200W is with both side release paper

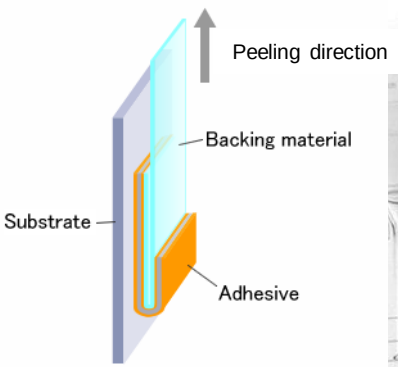
Suitable use

■Ideal for bonding the LCD windows and nameplates.

Technical data

1. Bonding strength on various type of substrate (180° peeling)

＜Test piece condition＞
Tape width: 20mm
Bonding condition: One stroke with 2-kg roller
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 300mm/min
Backing material: 25μmPET
[Left at RT at one hour before measurement]



＜180° peeling strength test＞

＜Results＞

(N/20mm)

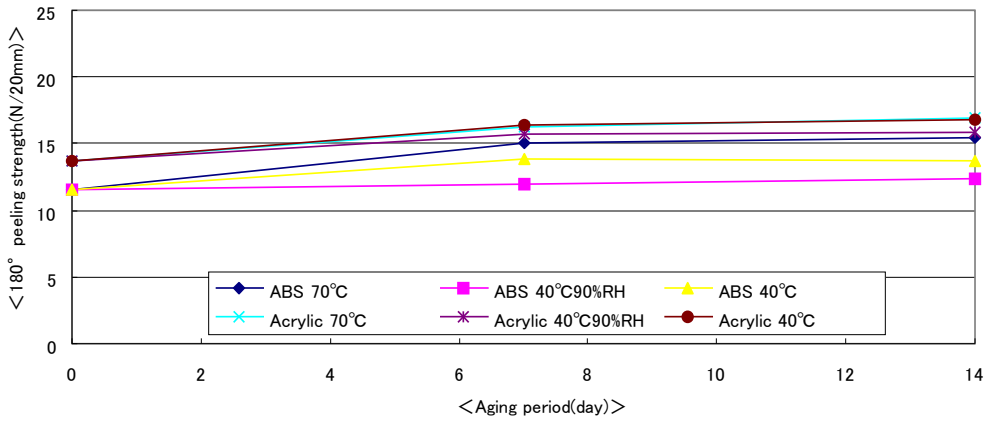
Substrate		SUS	Acrylic	ABS	PC	UV Coated surface	Glass
180° peeling strength	G9200	14.5	13.7	11.6	11.5	8.4	8.8
	G9220	14.9	14.1	11.8	11.6	10.2	9.7

2. Reliability of bonding strength under different conditions (180° peeling)

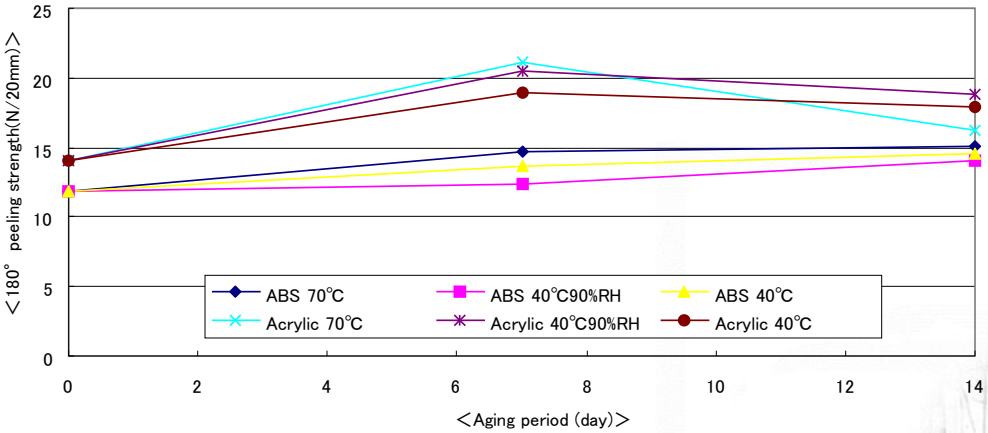
<Test piece condition>
Tape width: 20mm
Bonding condition: One stroke with 2-kg roller
Measuring condition: 23℃±5℃ 60%±20%RH
Peel speed: 300mm/min
Backing material: 25μmPET
[Left at RT for one day and aged under each condition before measurement]

＜Results＞

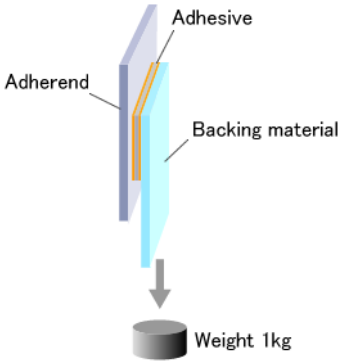
G9200 peeling strength



G9220 peeling strength



3. Holding power at different temperatures



＜Holding power test＞

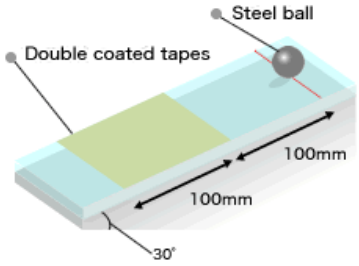
＜Test piece condition＞
Substrate：Stainless steel plate (SUS304)
Bonding area：25mm × 25mm
Bonding condition：One stroke with 2-kg roller
[Left at RT for one hour and measure creep length after one hour application of 1-kg load at each temperature]

＜Results＞

Measurement temperature		40℃	60℃	80℃
Creep length (mm)	G9200	0.2	0.6	1.0
	G9220	0.4	0.8	1.4

4. Ball tack test (J. Dow)

Ball tack test (Ball No.)	G9200	23 to 26
	G9220	23 to 26

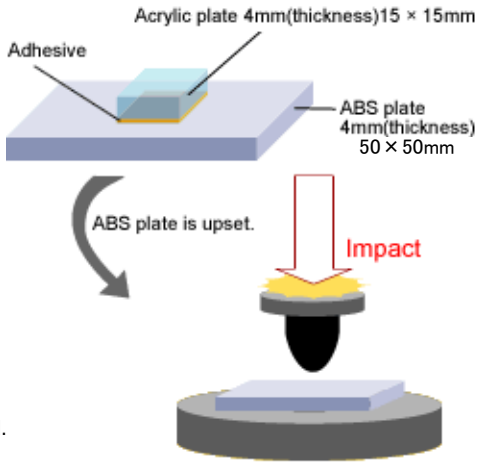


＜Ball tack test＞

5. Impact force resistance

＜Test piece condition＞
Measuring instrument：DuPont type impact tester
Substrate：ABS plate 50mm × 50mm × 4mm
Substrate：Acrylic plate 15mm × 15mm × 4mm
Bonding area：15mm × 15mm
Measuring condition：10℃
[Dropping 300g weight onto the ABS face from a height of 15cm]
[Left at RT for one day after adhesion, and then under each condition for 30 minutes before measurement]

* The impact is added by one of the methods of measuring an impact of the adhesive tape, the state of peeling off and the floatage is confirmed by watching, and the number of examinations and the number of which it peels off are recorded.



＜Impact force resistance test＞

＜Results＞

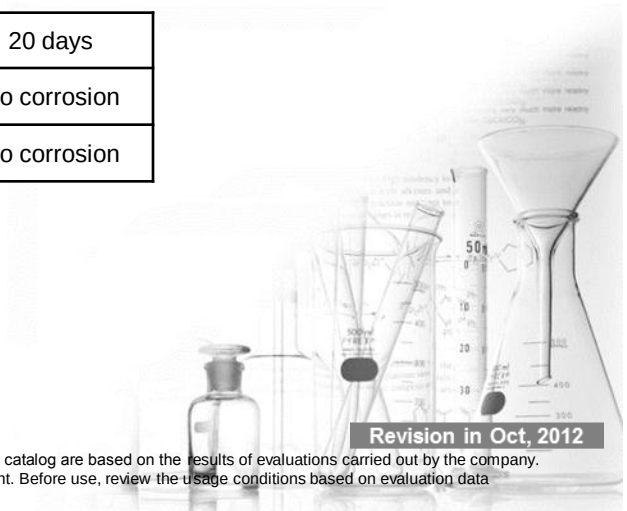
Product name			G9200	G9220
Impact force resistance test	10℃ (n = 5)	n1	not peeling off	not peeling off
		n2	not peeling off	not peeling off
		n3	not peeling off	not peeling off
		n4	not peeling off	not peeling off
		n5	not peeling off	not peeling off

6. Resistance to corrosion of AL evaporated film

＜Test piece condition＞
Substrate：Acrylic plate with AL evaporated film and UV-coated ABS plate
Measuring condition：60℃ 90%RH

＜Results＞

	5 days	10 days	20 days
G9200	No corrosion	No corrosion	No corrosion
G9220	No corrosion	No corrosion	No corrosion



Revision in Oct, 2012

Note on the characteristic data given— Data on the characteristics of the products described in this catalog are based on the results of evaluations carried out by the company. This does not guarantee that the characteristics of the product conform with your usage environment. Before use, review the usage conditions based on evaluation data obtained from the equipment and substrates actually used.

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