

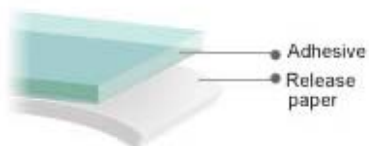
Water proof & Impact force resistant type double coated tapes

UT6600MLseries

Features

- Adhesive tape with lower environmental impact with UV curable manufacturing method (non solvent adhesive coating process).
- High impact force resistance. High initial adhesion.
- Excellent water proof performance.

Structure



	UT6615ML	UT6620ML	UT6625ML	UT6630ML	UT6640ML	UT6650ML	UT6660ML
Main component	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
Carrier	Non-carrier	Non-carrier	Non-carrier	Non-carrier	Non-carrier	Non-carrier	Non-carrier
Color	White	White	White	White	White	White	White
Adhesive thickness (μm)	About 150	About 200	About 250	About 300	About 400	About 500	About 600
Release paper thickness (μm)	About 150	About 150	About 150	About 150	About 150	About 150	About 150
Bonding strength (N/20mm) ※	20.9	29.4	32.5	38.3	49.2	70.9	74.4
St'd size (width & length)	500mm × 50M	500mm × 50M	500mm × 50M	500mm × 50M	500mm × 50M	500mm × 50M	500mm × 50M

※ 90° Peeling strength

Suitable use

- Ideal for bonding top plates and housings of cellular phones.

Technical data

1. Temperature resistance

UT6600ML series	
Short Term	140°C
Long Term	100°C



2. Bonding strength on various type of substrate(90° peeling)

<Test piece condition>

Tape width : 20mm

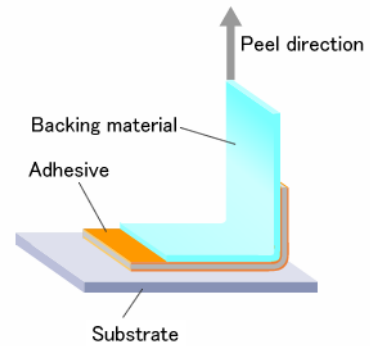
Bonding condition : One stroke with 2-kg roller

Measuring condition: 23°C±5°C 60%±20% RH

Peeling speed : 300mm/min

Backing material : 50μm SUS foil

[Left at RT for one day before measurement]



< 90° Peeling strength test >

<Test data>

(N/20mm)

		SUS	ABS	PMMA	Glass	AL	PC	SECC
90° Peeling strength	UT6615ML	20.9	20.5	17.6	20.6	11.5	19.8	13.8
	UT6620ML	29.4	25.2	23.8	25.1	13.5	25.7	18.1
	UT6625ML	32.5	27.4	25.8	28.3	14.7	29.2	21.3
	UT6630ML	38.3	30.4	32.0	35.8	19.2	36.3	23.4
	UT6640ML	49.2	33.4	38.1	48.5	21.6	45.6	27.3
	UT6650ML	70.9	58.8	49.5	58.8	22.1	51.5	35.5
	UT6660ML	74.0	50.7	55.3	64.4	23.4	57.1	36.8

3. Holding power at different temperatures

<Test piece condition>

Substrate: Stainless steel plate (SUS304)

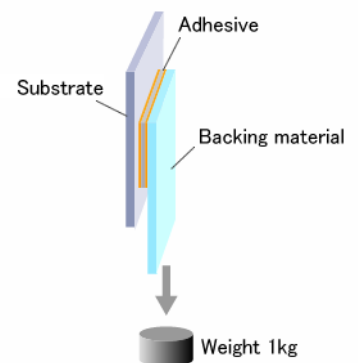
Bonding area : 25mmx25mm

Bonding condition : One stroke with 2-kg roller

Backing material : 25μm PET film

[Left at RT for one hour and then at each temperature for 30 minutes before measurement]

[Measure creep length after one hour application of 1-kg load at each temperature]



<Holding power test>

< Test data >

		40°C	100°C
Creep length (mm)	UT6615ML	0.2	0.2
	UT6620ML	0.2	0.2
	UT6625ML	0.2	0.2
	UT6630ML	0.2	0.2
	UT6640ML	0.2	0.3
	UT6650ML	0.4	0.5
	UT6660ML	0.4	0.5

4. Impact force resistance

<Test piece condition>

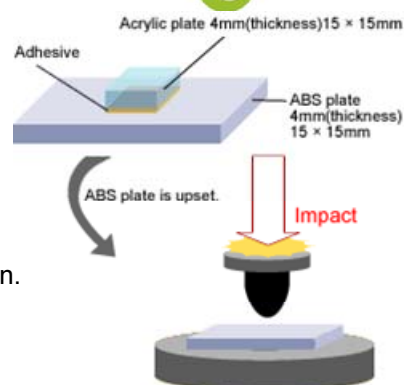
Substrate: ABS plate 50 × 50mm × 4mm
PMMA plate 15 × 15mm × 4mm

Bonding area: 15 × 15mm

Measurement condition: RT, 0°C

[Left at RT for 24hours, and then at each temperature for 30min.
before measurement.]

[Drop the weight (300g) from 30cm height]



< Impact force resistance test >

< Test data >

OK=No drop or peeling

		RT	0°C
Impact force resistance	UT6615ML	OK	OK
	UT6620ML	OK	OK
	UT6625ML	OK	OK
	UT6630ML	OK	OK
	UT6640ML	OK	OK
	UT6650ML	OK	OK
	UT6660ML	OK	OK

5. Water proof test

<Test piece condition>

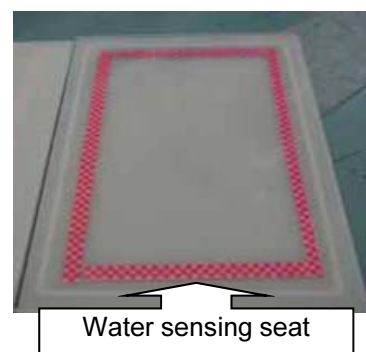
Substrate: ABS plate 45 × 65mm × 1mm
PMMA plate 45 × 65mm × 1mm

Bonding area: 40 × 60 × 1mm

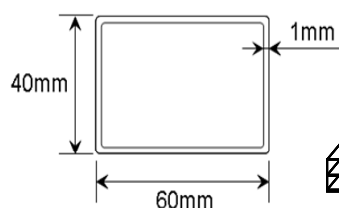
Measurement condition: Sink in tap water(40°C) and apply pressure
(equivalent of 10M depth)

Judge by water sensing seat

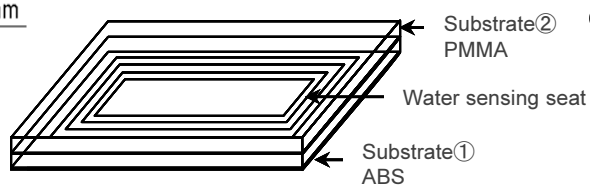
*Evaluation level: Equivalent of IPX7 or more



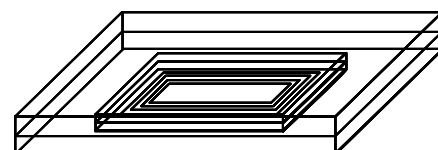
Water sensing seat



Tape shape ----



Test piece

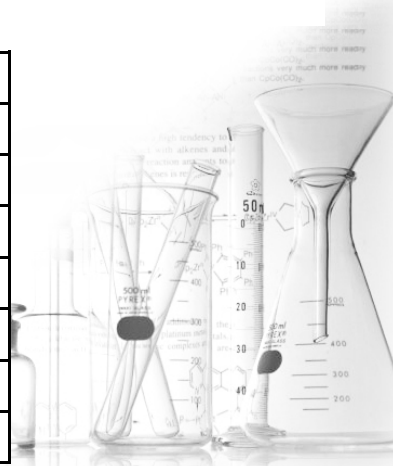


Sink the test piece in the tray filled with tap water

< Test data >

<Water proof test>

		30min.	60min.
Water proof test	UT6615ML	OK	OK
	UT6620ML	OK	OK
	UT6625ML	OK	OK
	UT6630ML	OK	OK
	UT6640ML	OK	OK
	UT6650ML	OK	OK
	UT6660ML	OK	OK



6. Push strength

<Test piece condition>

Substrate①: ABS plate 100 × 50mm × 5mm (30φ hole)

Substrate②: PMMA plate 50 × 50mm × 3mm

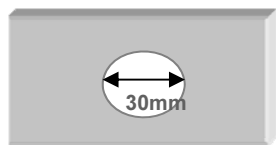
Bonding area: 2mm width 40mm × 40mm

Bonding condition: One stroke with 2kg roller

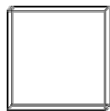
Measurement condition: RT

Push speed: 20mm/min

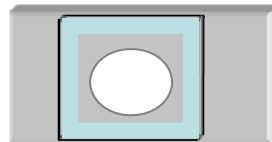
[Left at RT for one hour before measurement]



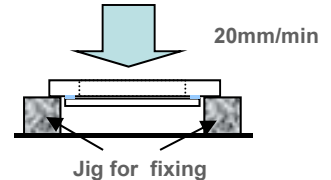
Substrate①



Substrate②



Bond with adhesive tape



20mm/min

Jig for fixing

(N)

	UT6615ML	UT6620ML	UT6625ML	UT6630ML	UT6640ML	UT6650ML	UT6660ML
Push strength	231	229	203	198	169	155	139

7. VHT test

<Test piece condition>

Substrate①: ABS plate 50 × 50mm × 4mm

Substrate②: PMMA plate 40 × 40mm × 1mm

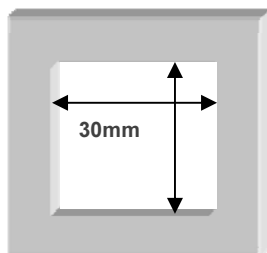
Bonding area: 40mm × 1mm × 2 lines

Bonding condition: One stroke with 2kg roller

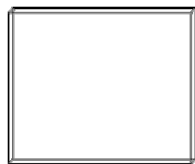
Measurement condition: 60°C95%RH

Weight: 50gf

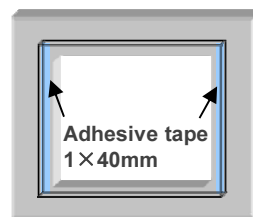
[Left at RT for 24hours, and then at 60°C95%RH for 48hours]



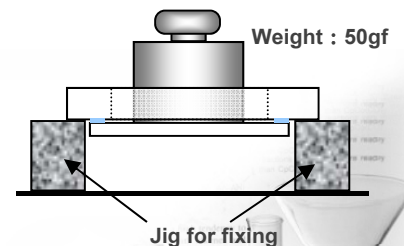
Substrate①ABS :
50 × 50 × 2 mm



Substrate②PMMA:
40 × 40 × 1 mm



Adhesive tape
1 × 40mm



Weight : 50gf

Jig for fixing

<VHT test >

< Test data >

OK=No drop or peeling

		UT6615ML	UT6620ML	UT6625ML	UT6630ML	UT6640ML	UT6650ML	UT6660ML
VHT test	48 hours	OK	OK	OK	OK	OK	OK	OK

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.

Dexerials Corporation

URL : <http://www.dexerials.jp/en/>

Head Office: Gate City Osaki, East Tower 8th floor, 1-11-2 Osaki, Shinagawa-ku, Tokyo, JAPAN 141-0032

Sales & Marketing Dep. TEL : +81-3-5435-3946