Dexerials

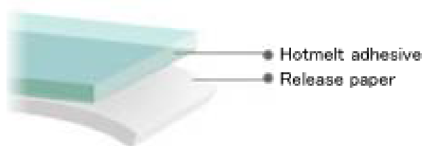
Technical Data Sheet

Special resin base hotmelt transfer tapes NP608

Features

- The adhesive layer of this tape is of uniform thickness and is without carrier. As a result, it can be made into a thin products.
- Low-temperature heat activation type enables bonding at 90℃.Stronger adhesion at more than 100℃.
- The tape is tack-free at room temperature, enabling punching and spinning without release paper. The design and appearance of the products on which it is used can be immensely improved.
- Its adhesive strength is retained at a wide range of temperatures.

Structure



Main component	Special resin
Carrier	Non-carrier
Color	Translucent white
Adhesive thickness (μm)	About 50
Release paper thickness (μm)	About 60
Bonding strength (N／4c㎡) *	155
St'd size (width & length)	400mm × 100m
Standard bonding condition	Temp: 100℃ to 140℃ Press time: 8 to 15sec Pressure: 0.2 to 0.3MPa

* Shear strength（Bonding at 120℃)（substrate: SUS/PC･ABS)

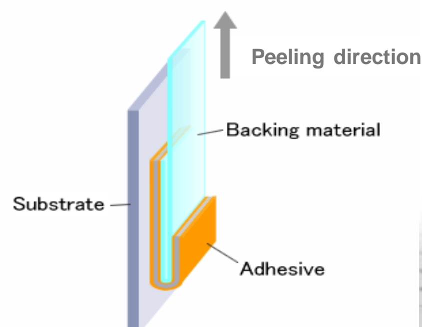
Suitable use

- It is suitable for the material bonding usage of plastic such as nameplates and front panels of electricity and an electronic equipment (ABS, PS, and acrylic resin, etc.) and the metals (aluminum and stainless steel plate, etc.).

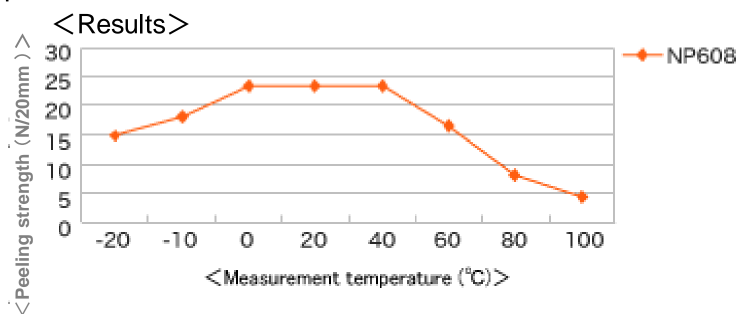
Technical data

1. Bonding strength at different temperatures (180° peeling)

<Test piece condition>
Substrate: ABS plate
Tape width: 20mm
Bonding condition: temperature:120℃, pressure:0.3MPa, press time:10sec
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 100mm/min
Backing material: 50μm Aluminum foil
[Left at RT for one day and then at each temperature for 30 minutes before measurement]

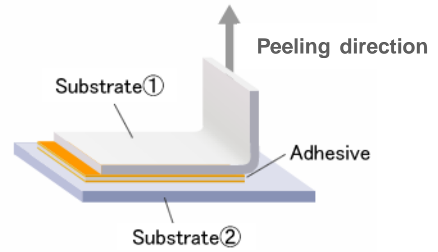


<180° peeling strength test>



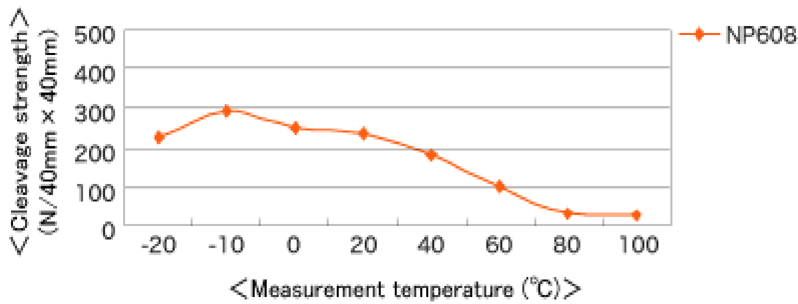
2. Bonding strength at different temperatures (Cleavage strength)

<Test piece condition>
Substrate: Aluminum plate (t=0.4mm)/ABS plate (t=5mm)
Bonding area: 40mm × 40mm
Bonding condition: temperature :120℃, pressure:0.3MPa, press time:10sec
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 20mm/min
[Left at RT for one day and then at each temperature for 30 minutes before measurement]



<Cleavage strength test>

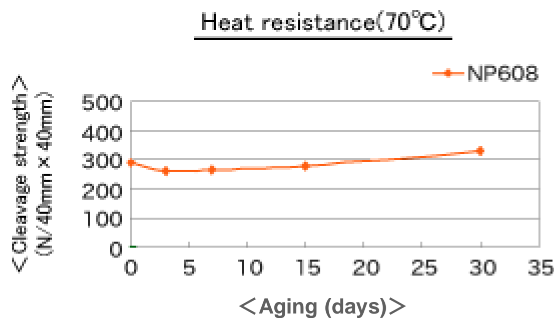
＜Results＞

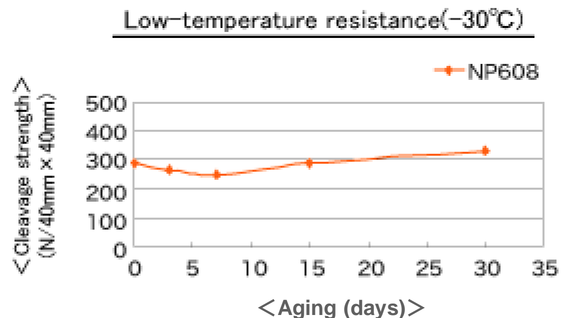


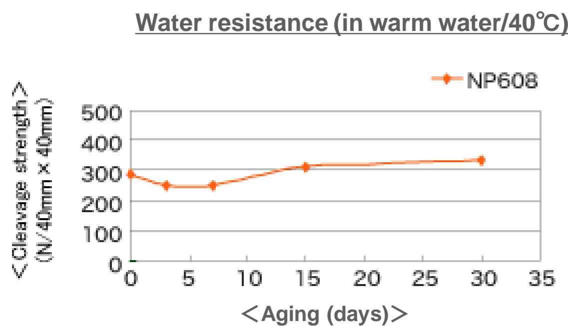
3. Reliability of bonding strength under different conditions (Cleavage strength)

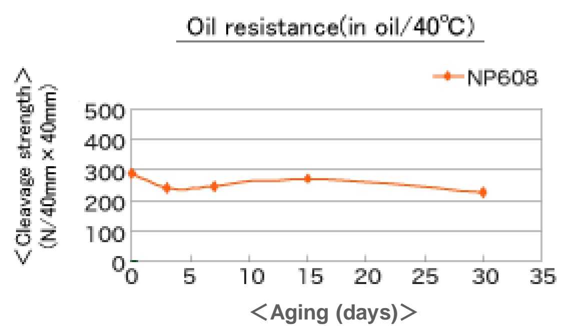
* The test condition is as the same as indicated in 2.Bonding strength at different temperatures.

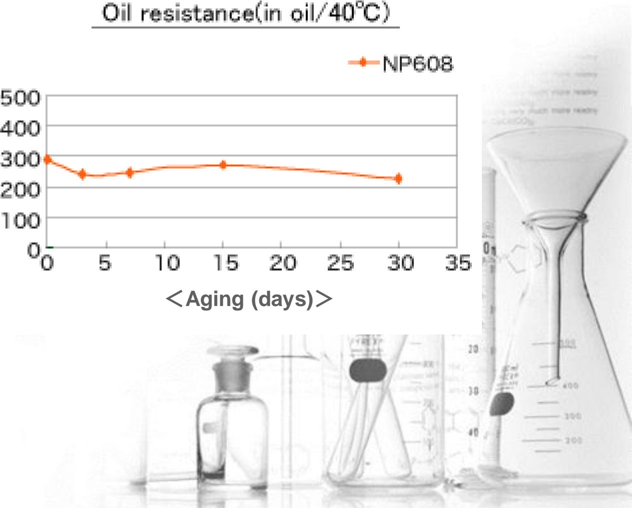
＜Results＞







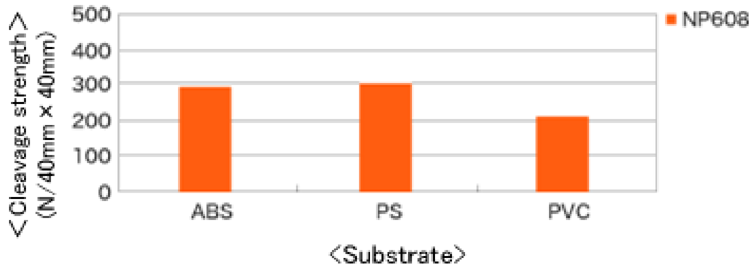




4. Initial bonding strength against different types of substrate（Cleavage strength)

<Test piece condition>
Substrate：Aluminum plate (t=0.4mm)/each substrate
Bonding area：40mm × 40mm
Bonding condition：temperature :120℃, pressure:0.3MPa,press time:10sec
Measuring condition：23℃±5℃ 60%±20%RH
Peeling speed：20mm/min
[Left at RT for one day and then at each temperature for 30 minutes before measurement]

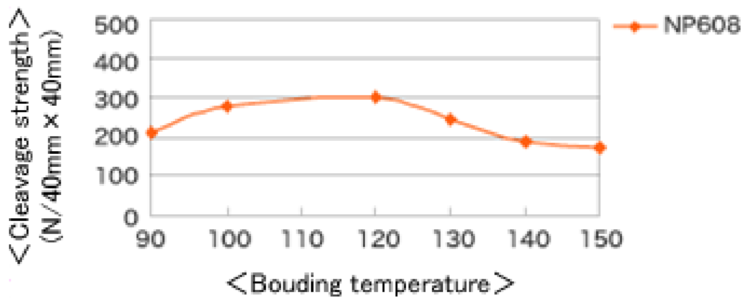
＜Results＞



5. Bonding strength at different bonding temperatures (Cleavage strength)

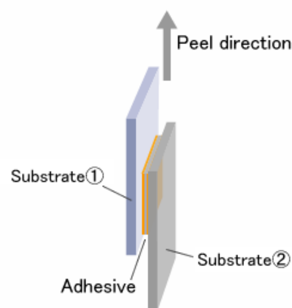
<Test piece condition>
Substrate：Aluminum plate (t=0.4mm)/ABS plate (t=5mm)
Bonding area：40mm × 40mm
Bonding condition：temperature :90℃ to 150℃, pressure:0.3MPa,press time:10sec
Measuring condition：23℃±5℃ 60%±20%RH
Peeling speed：20mm/min
[Left at RT for one day and then at each temperature for 30 minutes before measurement]

＜Results＞



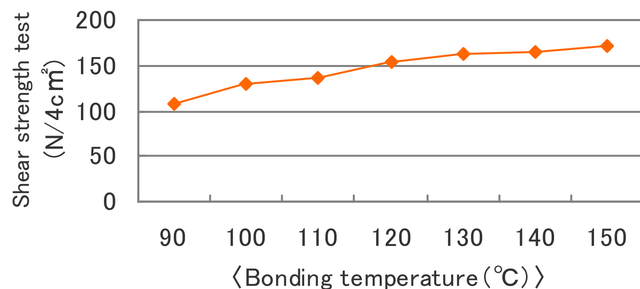
6. Bonding strength under different temperatures (Shear strength)

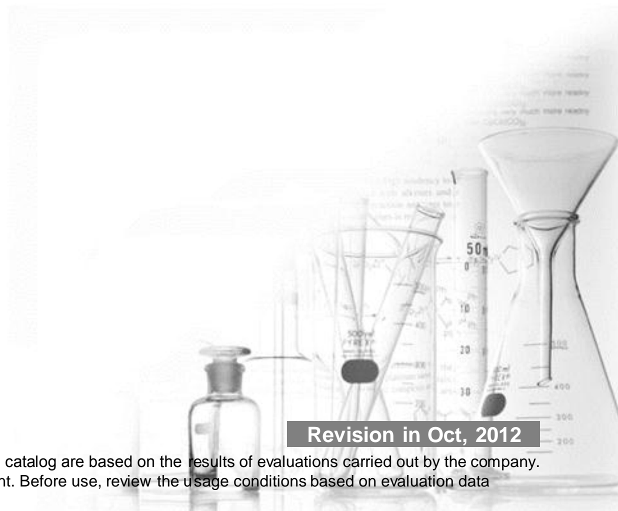
<Test piece condition>
Substrate: SUS plate (t=0.5mm)/PC･ABS plate (t=5mm)
Bonding area: 20mm × 20mm
Bonding condition: temperature :90℃ to 150 ℃, pressure:0.3MPa, press time:10sec
Measuring condition: 23℃±5℃ 60%±20%RH
Peeling speed: 20mm/min
[Left at RT for one day before measurement]



<Shear strength test>

＜Results＞





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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