Double-coated adhesive tape

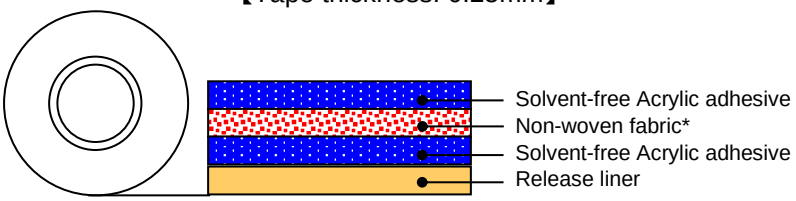
No.515

Outline

Nitto No.515 is Low VOCs double-coated adhesive tape using by solvent-free acrylic adhesive. Excellent bonding performance to various substrates such as reinforcement of interior fitting, metal and plastic.

Structure

No.515
【Tape thickness: 0.25mm】



As can be seen, we printed「Nitto LowVOCs 」with
the Release liner, have to be recognized as Low VOCs double-coated adhesive Tape.
* "Non-woven fabric" is classified under a law called Customs Act of Fixed Rate Chapter 48
"Paper and paperboard; articles of paper pulp, of paper or of paperboard".

Features

- Low (*) VOCs double-coated adhesive tape) (*) : Volatile Organic Compounds
- Thick type (As tape thickness is 0.25mm) , ideal for bonding of interior fittings reinforcement.
- Excellent Adhesion to substrates using by flexible non-woven fabric.
- The ten hazardous materials restricted by the RoHS directive are not compounded.

Applications

- Fixing of interior fittings reinforcement.
- Fixing of metal name plate.
- Fixing of plastic display plate.

Standards Sizes

Tape thickness (mm)	Widths (mm)	Lengths (m)
0.25	3 - 1200	20, 50

For more information, please contact us.

Properties

●VOCs　emission

VOCs	Guideline values [μg/m³]	No.515
Formaldehyde	100	ND
Toluene	260	ND
(o, m, p-) Xylene	200	ND
p-dichlorobenzene	240	ND
Ethylbenzene	3800	ND
Styrene	220	ND
Chlorpyryphos	1	ND
n-buthyl benzyl phthalate	17	ND
Tetradecan	330	ND
bis- (2-ethylhexyl) phthalate	100	ND
Diazinon	0.29	ND
Acetaldehyde	48	ND
Fenobucarb	33	ND

<Analysis method>
JIS A-1901: 2015
Small sized chamber method
●17th January 2019
Guidelines published by the Ministry of Health, Labor and Welfare (indoor air pollution)

ND=not detected

※　VOCs emission of No.515 is below limit of detection.

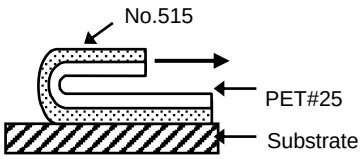
Properties

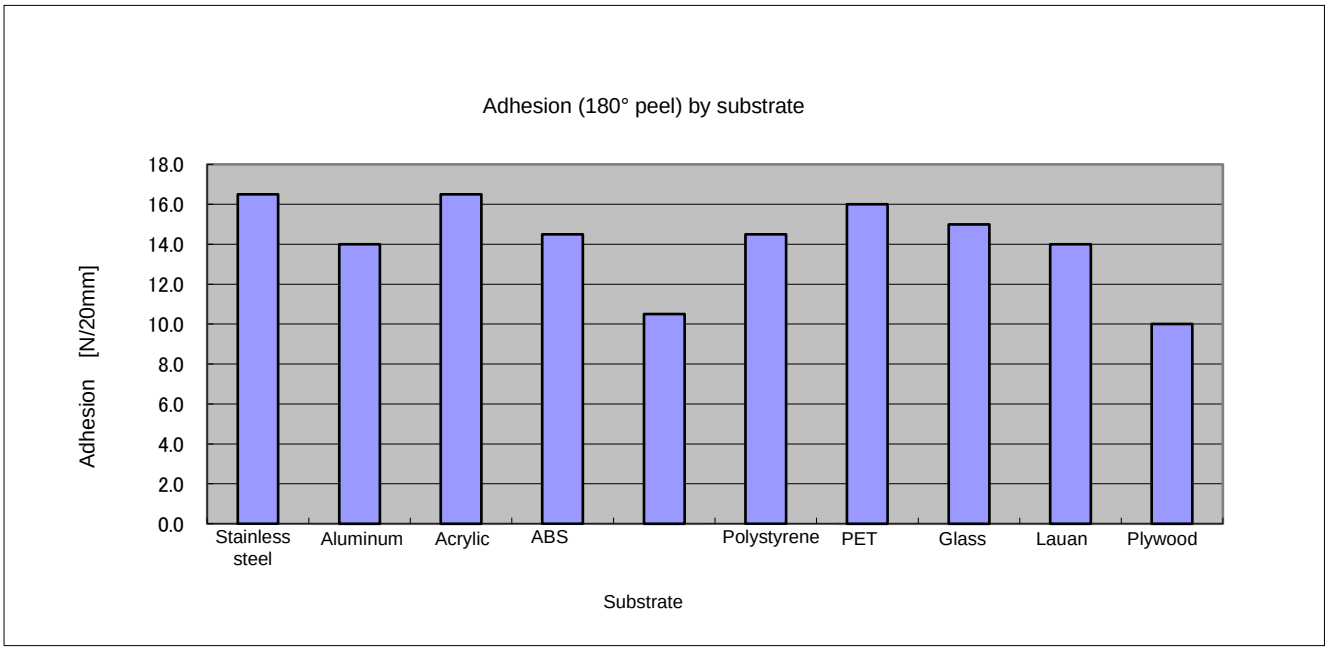
●Adhesion (180° peel) by substrate

Substrate	No.515
Stainless steel plate	16.5
Aluminum plate	14.0
Acrylic plate	16.5
ABS plate	14.5
Polypropylene plate	10.5
Polystyrene plate	14.5
PET film	16.0
Glass plate	15.0
Lauan	14.0
Plywood plate	10.0

(Unit: N/20mm)
Backing: PET#25
Peeling speed: 300mm/min
Peeling angle: 180˚
Measurement temperature: 23℃, 50%RH
Pressure application conditions:
1 pass back and forth with 2-kg roller

<Test method>



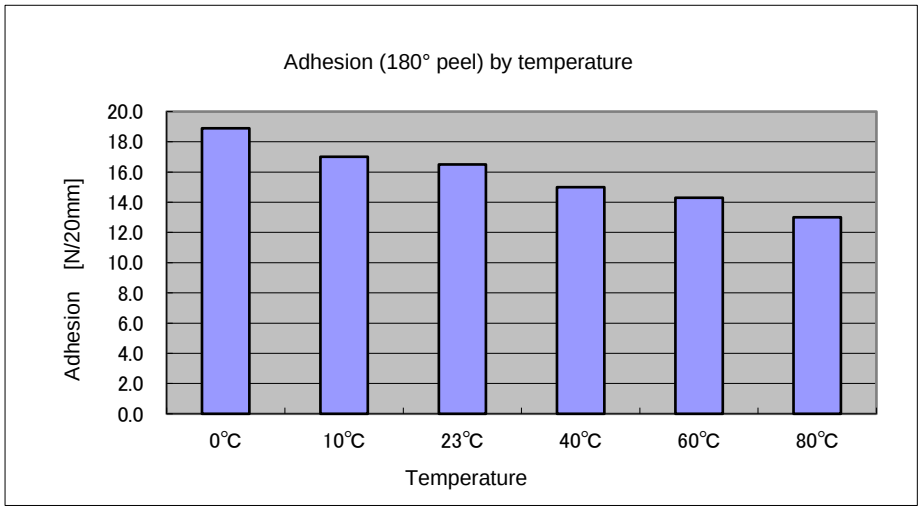


Properties

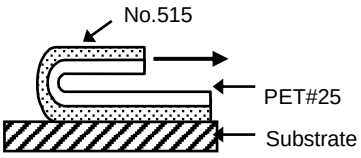
●Adhesion (180° peel) by temperature

Temperature	No.515
0℃	18.9
10℃	17.0
23℃	16.5
40℃	15.0
60℃	14.3
80℃	13.0

(Unit: N/20mm)
Substrate: stainless steel plate
Backing: PET#25
Peeling speed: 300mm/min
Peeling angle: 180°
Measurement temperature: 0℃, 10℃, 23℃, 40℃, 60℃, 80℃
Application condition: 1 pass back and forth with 2-kg roller



<Test method>

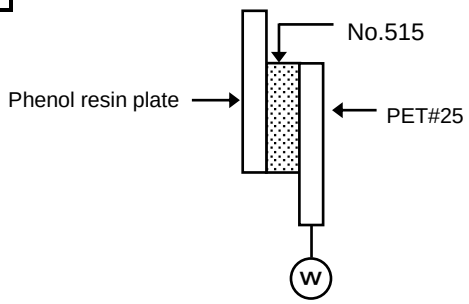


Properties

● Holding power by temperature

Measurement Temperature	No.515
40℃	0.6
60℃	0.8
80℃	0.9

(Unit: mm/hr)
Substrate: Phenol resin plate
Tape area: 10mm x 20mm
Load: 4.90N
Measurement temperature: 40℃、60℃、80℃

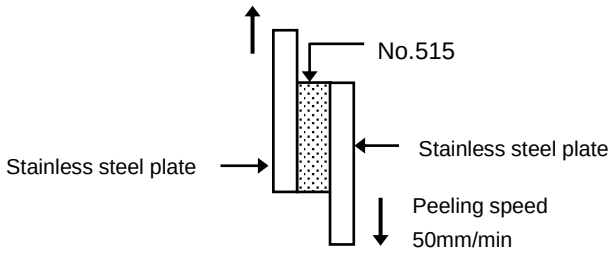


●Shear strength by temperature

Temperature	No.515
0℃	750
23℃	420
40℃	260

(Unit: N/20mmx20mm)
Substrate: Stainless plate / Stainless plate
Tape area: 20mm × 20mm
Peeling speed: 50mm/min
Measurement temperature: 0℃、23℃、40℃
Measurement method: A specimen is prepared and shear strength is measured after allowing it to set 30 minutes.

<Test method>

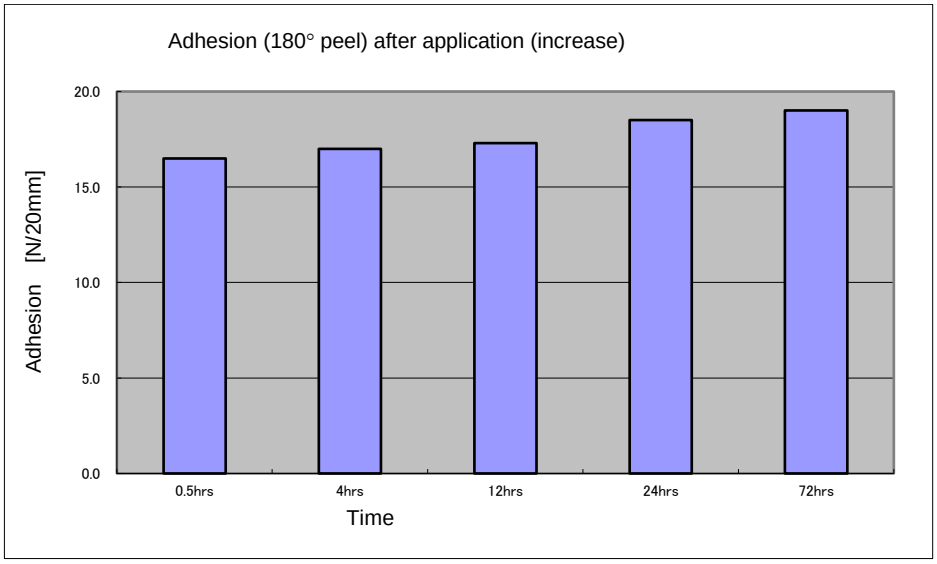


Properties

●Adhesion (180° peel) after application (Leave at 23℃)

Temperature	Time	No.515
23℃	0.5 hrs	16.5
	4 hrs	17.0
	12 hrs	17.3
	24 hrs	18.5
	72 hrs	19.0

(Unit: N/20mm)
Substrate: Stainless steel plate
Backing: PET#25
Peeling speed: 300mm/min
Peeling angle: 180˚
Measurement temperature: 23℃, 50%RH



●Adhesion (180° peel) (Leave at high humidity)

		No.515
Initial		16.5
40℃92%RH	14 days	16.2
	30 days	16.4

(Unit: N/20mm)
Lining material: PET#25
Peeling speed: 300mm/min
Peeling angle: 180˚
Measurement temperature: 23℃, 50%RH
Substrate: Stainless steel plate

Precautions when using

- Remove all oil, moisture and dirt from the surface of the substrate before applying.
- The tape employs pressure-sensitive adhesive. Be sure to apply pressure with a roller or press when applying. Failure to do so could affect properties or appearance.
- The tape may not adhere well to significantly uneven or distorted surfaces. Level off the surface as much as possible before applying.
- Avoid applying a large load to the tape for several hours following application.

Precautions when storing

- Be sure to keep the tape in its box when not using.
- Keep in a cool dark place not exposed to direct sunlight.

Safety precautions

⚠ WARNING

- Make sure the product is suitable for the application (objective and conditions) before attempting to use. The tape may come off depending on the substrate to or conditions under which it is applied.
- Use in combination with another method of joining if there is possibility of an accident.

Published in January 2025