Double-coated adhesive tape

No.501L

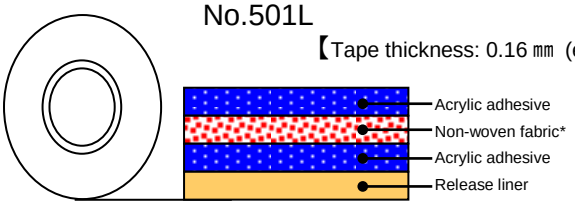
Outline

Nitto No.501L is a double-coated adhesive tape consisting of flexible non-woven fabric impregnated with acrylic adhesive. The tape is suitable for laminating processes for all kinds of foam, such as ether or ester based urethane foam. It is ideal for work involving punching and is easy to process.

Structure

No.501L

【Tape thickness: 0.16 ㎜ (excluding release liner)】



* "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

- ●Excellent adhesion to rough surfaces.
- ●Offers superior adhesion at low temperatures and exhibits stable performance even during the winter.
- ●Excellent repelling resistance, also preventing lifting on curved edges of foam, etc.
- ●The ten hazardous materials restricted by the RoHS directive are not compounded.

Applications

- ●Bonding of various types of foam
- ●Used for application to urethane foam, etc.

Sizes

Tape thickness (mm)	Width (mm)	Length (M)
0.16	5 - 1,050	50

For details contact the department in charge of the product in question.

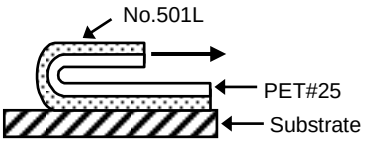
Properties

●180 degree peeling adhesive strength for each substrate

Substrate	No.501L
Stainless steel plate	10.0
Aluminum plate	10.5
ABS plate	9.5
Acrylic plate	10.5
Polypropylene plate	7.5

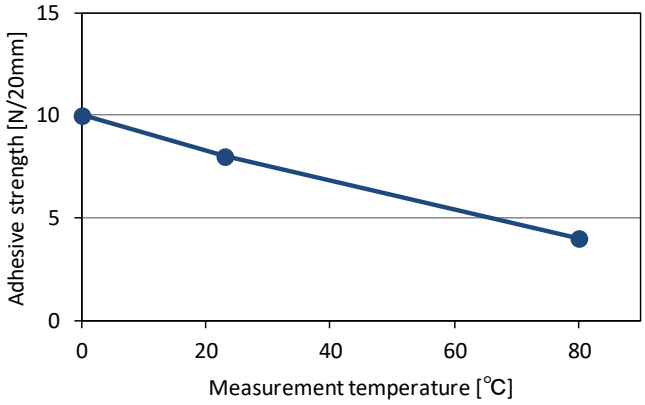
(Unit: N/20 mm)
Tape area: 20mm width
Lining material: PET#25
Pressing condition: 1 pass back and forth with 2-kg roller at 23 degree C, 50%RH
Applying condition: 23 degree C, 50%RH x 30min
Peeling speed: 300 mm/min
Peeling angle: 180 degree
Measurement temperature: 23 degree C, 50%RH

〈Test method〉



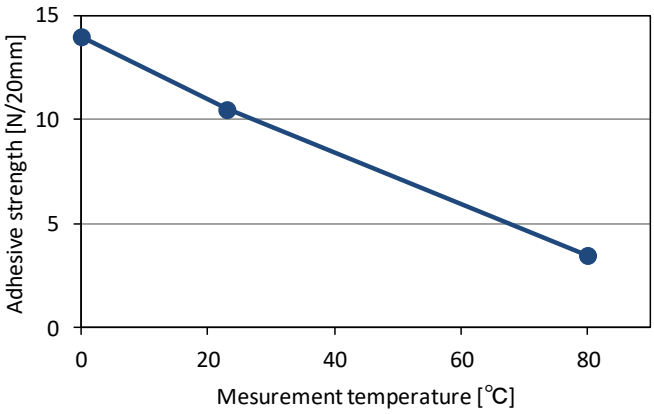
●Dependency of adhesive strength of temperature

［Ether based urethane foam］



(Unit: N/20 mm)
Lining material: PET #25
Pressure conditions: Foam thickness 90% compression
Pressure temperature: 23°C
Setting/measurement temperature: 0, 23, 80°C
Peeling speed: 300 mm/min
Foam thickness: 5 mm
Peeling angle: 180°
Test method: 180° peeling method

［Ester base urethane foam］



Properties

●180° peeling adhesive strength under low temperature (0°C)

	Ether urethane foam	Ester urethane foam
No.501L	8.0	9.0

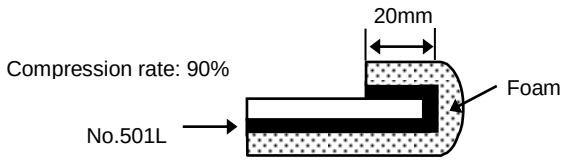
(Unit: N/20 mm)
Lining material: PET #25
Pressure conditions: Foam thickness
90% compression
Setting/measurement temperature: 0°C
Peeling speed: 300 mm/min
Foam thickness: 5 mm
Test method: 180° peeling method

●Repelling resistance (for various types of foam)

Substrate	Foam type	23℃	80℃
ABS	Ether urethane foam	○	○
	Ester urethane foam	○	○
	Moltopren SK	○	○
	Super seal SWB	○	○

Pressure temperature: 23°C
Measurement temperature: 23, 80°C
Pressure conditions: Foam thickness
90% compression
Foam thickness: 10 mm
Tape width: 20 mm
Evaluation: Floating/peeling after min. of 100 hrs

○: No peeling

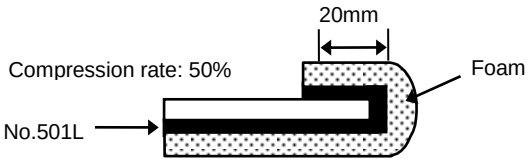


●Repelling resistance (at low pressure)

Substrate	Foam type	23℃	80℃
ABS	Ether urethane foam	○	○
	Ester urethane foam	○	○

Pressure temperature: 23°C
Measurement temperature: 23, 80°C
Pressure conditions: Foam thickness
50% compression
Foam thickness: 10 mm
Tape width: 20 mm
Evaluation: Floating/peeling after min. of 100 hrs

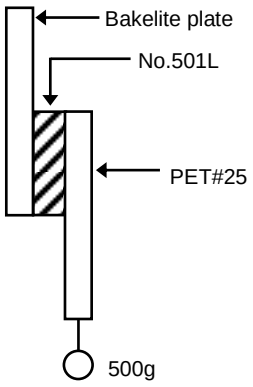
○: No peeling



●Holding strength

Sample	40℃
No.501L	1.3

(Unit: mm)
Substrate: Bakelite plate
Bonding temperature: 23degreeC/50%RH
Curing condition:
Measurement temperature x 30min
Measurement temperature: 40 degree C
Application area: 20mm x 10mm
Load: 4.9N (500g)
Loading time: 30 minutes



Precautions when using

- ●Remove all oil, moisture and dirt from the surface of the substrate before applying.
- ●Since the tape is pressure-sensitive adhesive, be sure to apply enough pressure with a roller or press when applying. Otherwise it might be affected to its properties and appearance.
- ●The tape may not adhere well to extremely uneven or distorted surfaces. Enough Leveling off the surface should be required before applying.
- ●It takes certain time to get full adhesive strength after applying, keep away the tape from any stress for a several hours after applying.

Precautions when storing

- ●Please be sure to keep the tape in its box when not using.
- ●Please keep in a cool and dark place away from 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 which it is applied or conditions under which it is applied. ●Use in combination with another method of joining if there is possibility of an accident.

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