

Product Data Sheet

Outline

Nitto Denko No. 5635 is 0.15 mm-thick thin layer polyester film based double-coated adhesive tape with acrylic adhesive.

The tape has a superior adhesion to curved surface and an excellent converting performance.

Structure



Features

- Superior adhesion to 3D curved surface as the thick adhesive.
- Excellent bonding performance to various substrates.
- Halogen-free* type. (*Chloride compounds are not used for this product.)
- The ten hazardous materials restricted by the RoHS directive are not compounded.

Applications

- Fixing of bonding of window panel for cellular phone.
- Fixing of various electronic component.

Standards Size

| Tape thickness (mm) | Width (mm) | Length (m) |
|---------------------|------------|------------|
| 0.15 | 500 | 100 |

For more information, please contact a person in charge.

No.5635 10-P-0140_E (1/6)

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180 degree peeling adhesion by substrates

| Substrates | No.5635 |
|-----------------------|---------|
| ABS plate | 16.0 |
| Polystyrene plate | 17.5 |
| Acrylic plate | 19.0 |
| Polycarbonate plate | 18.5 |
| Glass plate | 19.0 |
| Stainless steel plate | 19.0 |
| Aluminum plate | 16.0 |
| Polyester film | 19.0 |
| Polyimide film | 16.5 |

(Unit: N/20mm) Backing: PET#25 Peeling speed: 300mm/min Peeling angle: 180 degree Measurement condition: 23 degree C. x 50%RH

<Pressure application conditions> * 1 pass back and forth with 2-kg roller

<Test method>



[Conforms to JIS Z-0237]



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180 degree peeling adhesion by temperatures

| Temperatures | No.5635 |
|--------------|---------|
| 0°C | 20.3 |
| 10°C | 19.6 |
| 23°C | 19.0 |
| 40°C | 17.1 |
| 60°C | 15.5 |
| 80°C | 13.9 |

(Unit: N/20mm) Backing: PET#25 Peeling speed: 300mm/min Peeling angle: 180 degree Measurement temperature: 0, 10, 23, 40, 60, 80 degree C. Application under various temperatures →Measurement under various temperatures Substrate: Stainless steel plate

<Pressure application conditions>

* 1 pass back and forth with 2-kg roller



Resistance to repulsion



(Unit: mm)

To laminate No.5635 to aluminum plate (20mm width, 0.5mm) and peel the release liner. Then it is laminated to a substrate ABS. Measure the lifting distance after leave it for 24 hours at 70 degree C.

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Properties

Holding power

| | No.5635 | <test method=""></test> |
|---|-----------|---------------------------|
| Slippage distance | 0.4 | No.5635 |
| (Unit: mm/hr) Measurement temperature: 40 c Application area: 10mm x 20mm Load: 4.9N (500g) Substrate: Phenol resin plate | legree C. | Phenol resin plate PET#25 |
| | | Ś |
| Shear strength | | |

| Temperature | No.5635 | <test method=""></test> |
|--|--|---|
| Shear strength | 560 | □ |
| (Unit: N/20mm x 20mm) Substrate: Acrylic plate/Acrylic plate Tape area: 20mm × 20mm Peeling speed: 50mm/min Measurement condition: 23 degree C * 1 pass back and forth with 5-kg Measurement method: A specimen is after allowing i | . x 50%RH roller prepared and shear strength is me t to set 30 minutes. | Acrylic plate Acrylic plate Acrylic plate Peeling speed |

180 degree peeling adhesion by pressures

| Pressures | No.5635 |
|-----------|---------|
| 0.1 kg | 16.3 |
| 0.5 kg | 18.5 |
| 2 kg | 19.0 |
| 5 kg | 19.2 |

(Unit: N/20mm) Backing: PET#25 Peeling speed: 300mm/min Peeling angle: 180 degree Measurement temperature: 23-degree C. x 50%RH

<Pressure application conditions>

1 pass back and forth with 0.1kg, 0.5kg, 2kg, 5kg



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Properties

●180 degree peeling adhesion after application (increase)

| Time | No.5635 |
|--------|---------|
| 0.5hrs | 19.0 |
| 4hrs | 19.2 |
| 12hrs | 19.3 |
| 24hrs | 19.6 |
| 48hrs | 19.9 |
| 72hrs | 20.1 |



Indentation adhesion

| | No.5635 |
|----------------------|---------|
| Indentation adhesion | 115 |



(Unit: N)

Acrylic plate:30 mm x 40mm Sample: 2mm width (a picture frame shaped) Diameter of hole: 13mm

The tape sample applied to the acrylic plate is adhered ABS plate by 1 pass back and forth with 5kg.roller After it left at 23 degree C. x 50% for 30 minutes, the acrylic plate is pushed through the hole with a probe 10mm at 5mm/min.

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(Unit: N/20mm)

Backing: PET#25 Peeling speed: 300mm/min Peeling angle: 180 degree Measurement temperature: 23 degree C. x50%RH Substrate: Stainless steel plate

<Pressure application conditions> 1 pass back and forth with 2-kg roller



- •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.

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