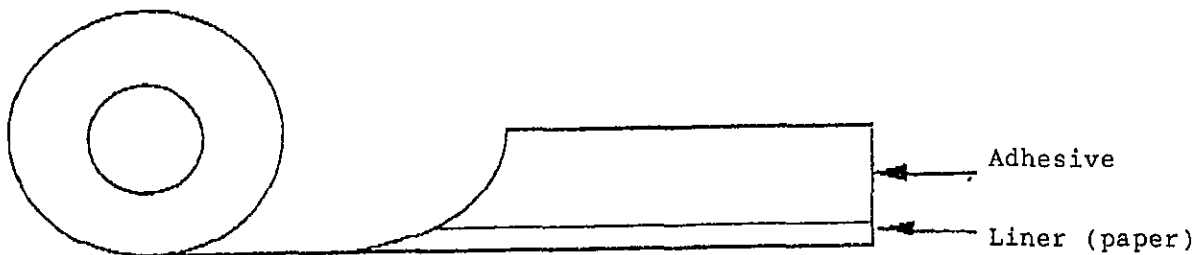


ULTRASTRONG DOUBLE-COATED ADHESIVE TAPE HJ-9210

1. OUTLINE

The ultrastrong double-coated adhesive tape HJ-9210 is colorless transparent thick double-coated adhesive tape having especially high adhesive strength, heat resistance and holding ability.

2. CONSTRUCTION



3. FEATURES

- 3.1 Excellent initial adhesivity
- 3.2 High adhesive strength
- 3.3 Excellent holding ability
- 3.4 High heat resistance
- 3.5 Excellent transparency

4. USES

- 4.1 Joining of metal panels
- 4.2 Fixing of parts

5. STANDARD SIZE

| Thickness (mm) | Width (mm) | Length (m) |
|----------------|------------|------------|
| 1.1 | 20 | 20 |

Nitto can supply the tapes of other sizes (width and length) not shown in the table above. Please contact Nitto.

6. PROPERTIES

6.1 General Properties

Table 1 General Properties

| Item | | Tape | HJ-9210 |
|------------------------------------|------------------------------------------------------------|------|----------------------------------------------|
| Thickness (mm) Backing Color | | | 1.1 Backing-less Colorless transparent |
| S-S characteristics | Breaking strength (kgf/cm ²) Elongation (%) | | 55 1250 |

6.2 Adhesion Properties

Table 2 Adhesion Properties

| Item | | Tape | HJ-9210 |
|-------------------------------------------------------|------------------------|------|---------|
| Shear adhesive strength (kgf/cm ²) (23°C) | Stainless steel plate | | 11 |
| | Aluminum plate | | 11 |
| | Acryl plate | | 12 |
| | ABS plate | | 11 |
| | Polystyrene | | 10 |
| | Polypropyrene | | 6 |
| 180° peeling adhesive strength (gf/20 mm) (23°C) | Stainless steel plate | | 3800 |
| | Aluminum plate | | 3500 |
| | Acryl plate | | 3900 |
| | ABS plate | | 2000 |
| | Polystyrene | | 3400 |
| | Polypropyrene | | 1200 |
| | PVC coated steel plate | | 3000 |
| Glass | | 5100 | |
| Veneer board | | 800 | |

6.3 Temperature Dependence

Table 3 Shear Adhesive Strength (kgf/cm²)

| Test Temperature (°C) | HJ-9210 |
|-----------------------|---------|
| -10 | 47 |
| 23 | 11 |
| 100 | 4 |
| 150 | 2 |

6.4 Holding Ability

Table 4 Holding Ability

| Test Temperature (°C) | HJ-9210 |
|------------------------------------|------------------------|
| 80°C x 1,000 min 150°C x 30 min | Excellent Excellent |

7. CARES WHEN USING

- 7.1 Before applying the tape, thoroughly clean the surface of substrate, removing oil, moisture, and foreign substances if any.
- 7.2 The adhesive of this tape is pressure-sensitive adhesive. After applying the tape sufficiently press it with roller or press.
- 7.3 Smooth the rough and coarse surface to get the smoothest possible surface.
- 7.4 Higher adhesive strength is attained after it is left untouched for a while after it is applied. Protect the applied tape from any undue force for several hours after it is applied.

8. CARES WHEN STORING

- 8.1 To store the tape, be sure to put it into a storing case.
- 8.2 Store the tape in dark cool place where direct sunlight does not affect.

9. OTHERS

Data shown in this data sheet are not used for any specification purposes.

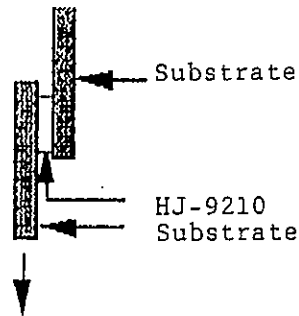
TESTING METHOD

S-S CHARACTERISTICS

Prepare the specimen by punching with dumbbell No.2.
Test at 23°C.

Tape width: 10 mm
Chuck-to-chuck distance: 20 mm
Stretching speed: 300 mm/min

SHEAR ADHESIVE STRENGTH



Bond two substrates at 23°C, and hold them for 72 hours.
Test at 23°C.

Tape area: 25 x 25 mm²
Stretching speed: 50 mm/min
Pressing: Once to-and-fro rolling with 5 kg roller

180° PEELING ADHESIVE STRENGTH



Test at 23°C according to JIS Z 0237.

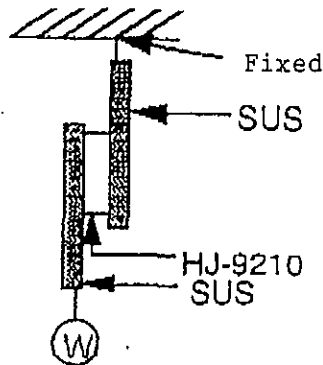
Stretching speed: 300 mm/min
PET (25 μm) lining

TEMPERATURE DEPENDENCE

Bond two substrates at 23°C, and then hold them for 72 hours. After that, hold them for one hour at specified temperatures, and then determine the shear adhesive strength at specified temperatures.

Substrates: Aluminum/Aluminum
Tape area: 25 x 25 mm²
Stretching speed: 50 mm/min
Pressing: Once to-and-fro rolling with 5 kg roller

HOLDING ABILITY



Bond two substrates at 23°C, and then hold them for 72 hours. After that, hold them for 30 minutes at specified temperatures, and then start the test.

Substrates: Aluminum/Aluminum
Tape area: 25 x 25 mm²
Load: 1,000 g
Pressing: Once to-and-fro rolling with 5 kg roller