

Double-coated adhesive tape with Halal Certification

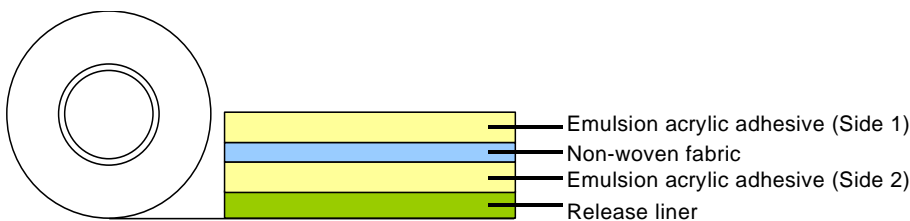
# HL-512



## General Description

Nitto HL-512 is a Halal-certified double-coated adhesive tape that uses emulsion acrylic adhesive to reduce the amount of VOC emitted and fit for Muslim consumption anywhere in the world. The tape is designed to offer firm bonding and user friendliness. HL-512 double-coated adhesive tape can be used on a wide variety of substrates including plastics as well as foam materials.

## Structure



## Features

- Double-coated adhesive tape with minimal volatile organic compounds (VOC) emission
- Adheres well to substrates such as foam materials, metal and plastics
- Uses non-woven fabric base, so it follows the contour of the substrate
- Ten restricted substances by RoHS are not contained
- Halal certified by American Halal Foundation (AHF)

## Applications

- Fixing for foam materials
- Fixing for plastic display plates
- Fixing films and paper

## Size

Tape thickness [mm]	Width [mm]	Length [M]
0.150	1000, 1050, 1200	50

For more details, please kindly contact our sales team.

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## Technical Properties

### ● General properties

Properties		Unit	HL-512
Tape thickness		mm	0.15
180° peeling adhesive strength	Side 1	N/20mm	14.0
	Side 2		15.1
Holding strength (Displacement)	Side 1	mm	1.4
	Side 2		1.1
Liner peel-ability		-	Easy peel without tape tear

#### Measurement method:

1. Tape thickness: 1/1000 dial gauge.
2. 180° Adhesive strength: Equipment tensile tester; Substrate stainless steel plate; Peeling speed 300mm/min
3. Holding power: Use phenolic resin plate as substrate. Apply a load of 4.90N to 10x20mm bonding area.  
Slippage is measured after 23°C x 1 hour.
4. Liner peel strength: Peel off liner at the angle 90 °.  
(Testing condition: Temperature 23 ± 2 °C; Relative humidity 50 ± 5 % RH; Lining material: #25 PET film)

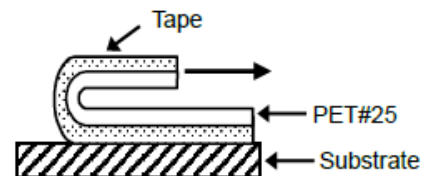
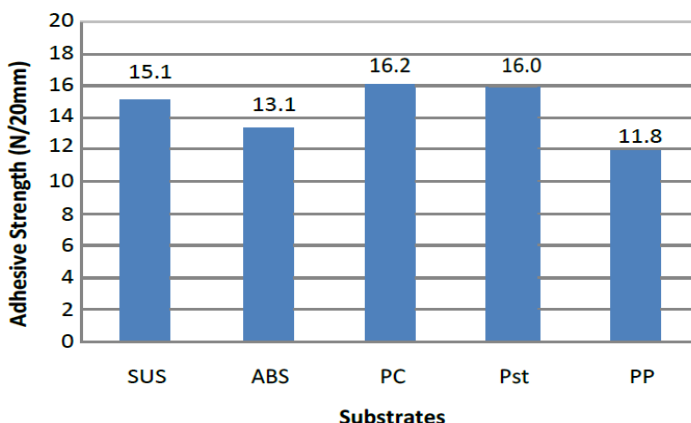
### ● Performance properties

#### 180 adhesive peeling strength for each substrate

Substrate	HL-512
Stainless steel plate	15.1
ABS plate	13.1
PC plate	16.2
Pst plate	16.0
PP plate	11.8

(Unit: N/20mm)

Application area: 20mm width  
 Lining material: PET#25  
 Application method:  
 1-pass back and forth with 2-kg roller  
 Applying condition: 23°C, 50% RH x30min  
 Peeling speed: 300mm/min  
 Peeling angle: 180degree  
 Measurement condition: 23°C, 50%RH



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## ● VOC Emission Measurement Values

Measurement material	Guideline values [ $\mu\text{g}/\text{m}^3$ ]	Emission rate [ $\mu\text{g}/\text{m}^2.\text{h}$ ]
Formaldehyde	100	ND
Toluene	260	ND
Xylene	200	ND
Paradichlorobenzene	240	ND
Ethylbenzene	3800	ND
Styrene	220	ND
Chlorpyrifos	1	ND
Dibutyl phthalate	17	ND
Tetradecane	330	ND
Di(2-ethylhexyl) phthalate	100	ND
Diazinon	0.29	ND
Nonanal	41	ND
Acetaldehyde	48	ND
Fenobucarb	33	ND

<Sample preparation & analysis method>  
Method conformable to JIS A 1901 &  
1904:2015

\*ND = Non-detected, means the test result is lower than guideline/ detection limit value.

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### Precautions when using

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- 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 affect the properties and appearance.
- The tape may not adhere well to extremely uneven or distorted surfaces. Enough leveling of 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

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- 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

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 <b>WARNING</b>
<ul style="list-style-type: none"><li>• 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.</li><li>• Use in combination with another method of joining if there is possibility of an accident.</li></ul>

Established in September 2021  
Revision 02, 4<sup>th</sup> October 2024

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