

NITTO DENKO

PRODUCT INFORMATION

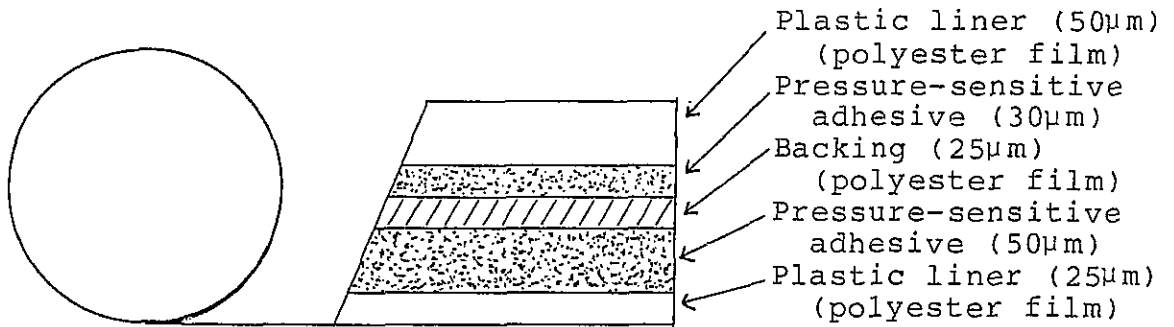
Ref. No. MC2030-D04-E 02'90

NITTO MC-2030

Double-coated Tape for Light-transmissive Nameplates

NITTO MC-2030 is a highly transparent double-coated tape specifically developed for light-transmissive nameplates.

1. Construction



2. Features

- 1) The adhesive face shows excellent smoothness.
- 2) Excellent heat resistance.
- 3) Highly transparent and the transparency will little change even after aging.

3. General Properties

Properties	MC-2030	No.500
Thickness (mm)	0.105	0.160
Adhesion at 20°C (g/20mm) to Stainless steel	1110	1400
Aluminum	1250	1450
ABS	980	1230
Styrol	970	1370
Shear strength		
at 20°C	45	55
(kg/4cm ²) at 70°C	35	22
Holding strength		
at 40°C		
500 g/2cm ²	0.3	0.4
(mm/hr.)		
1000 g/2cm ²	0.4	Fell down after 48min.



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4. Properties of Tape

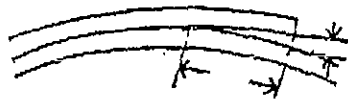
4.1 Repulsion Resistance

Table 1 Repulsion Resistance (mm)

Sample	Aging Time at 70°C Ambient Temp. (hrs.)			
	0.5	1	2	15
NITTO MC-2030	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0
NITTO No.500	0, 0, 0	0, 0, 0	0, 0, 1 5	0, 0, 1 5
Competitive Item (PET-based)	0, 0, 0	0, 0, 0	1.5, 1.5, 1 25, 20, 20	*13, 9, 20 #60, 56, 70

(n=3)

* upper row

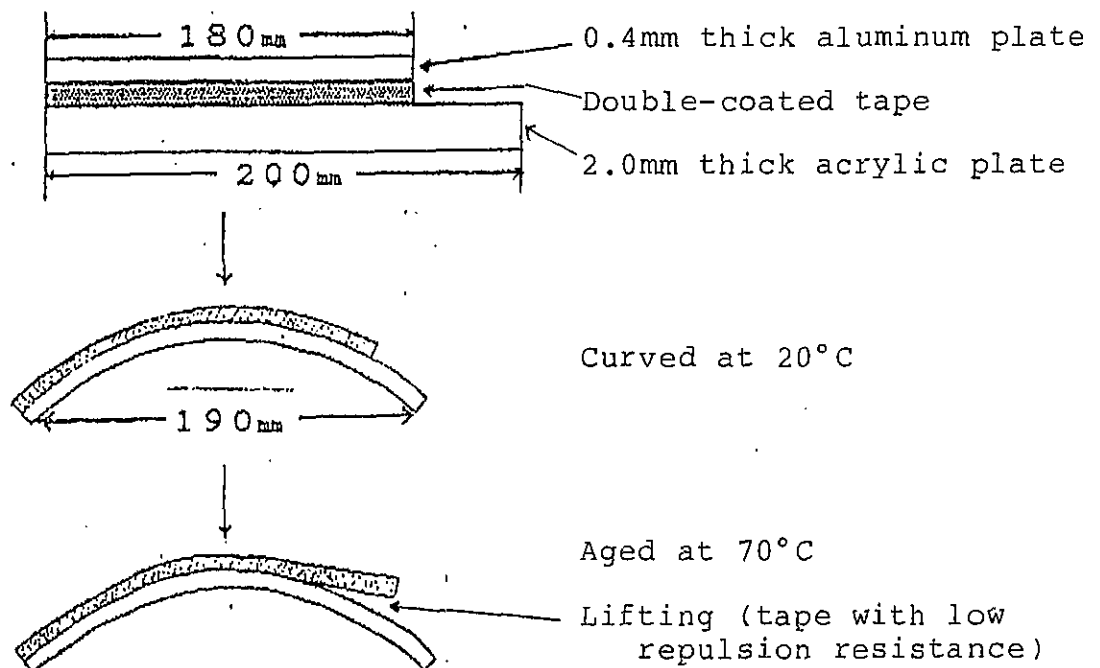


Lifting height (mm)

lower row

Extent of lifting progress (mm)

Test method: A test piece as shown below was prepared and the lifting was examined after aging it at 70°C. 3 test pieces were tested.



4.2 Adhesion

Table 2 180° Peel Strength to Acrylic Resin vs.
Temperature (g/20mm)

Sample	Measuring Temperature (°C)			
	20	40	60	80
NITTO MC-2030	1460	1360	1160	700
NITTO No.500	1480	1240	1430	600
Competitive Item (PET-based)	1430	2070	1700	430

Table 3 180° Peel Strength to Polycarbonate vs.
Temperature (g/20mm)

Sample	Measuring Temperature (°C)			
	20	40	60	80
NITTO MC-2030	1300	1000	890	590
NITTO No.500	1510	1070	1350	610
Competitive Item (PET-based)	1380	1920	1460	380

4.3 Visible Light Transmittance

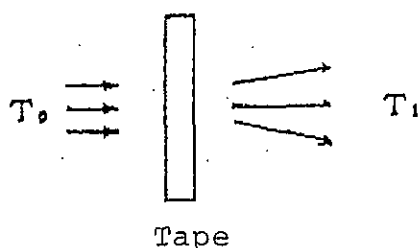
Table 4 Transmittance

Conditions	Visible Light Transmittance (%)	Haze (%)
Normal state	92	1.6
100°C x 21 days	92	1.6
60°C x 95%RH x 21 days	92	1.6
Weatherometer exposure x 21 days	91	2.1

Test method: The tape was cut to a certain size, then, aged for 3 weeks at 100°C, 60°C x 95%RH, and in the sunshine type weatherometer respectively. After the tape was taken out, the liner was removed and the optical properties of it were examined.

Measuring method:

- * Visible light transmittance (all light transmittance)

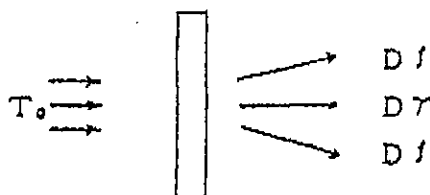


T_0 : incident light strength

T_1 : all transmitted light strength

$$T (\%) = \frac{T_1}{T_0} \times 100$$

- * Haze (ratio of scattered light transmission to all light transmission)



D_s : all scattered light transmission strength

D_p : all parallel light

$$H_z (\%) = \frac{D_s}{D_s + D_p} \times 100$$

NOTE: All technical data figures herein presented are typical and should not be used for any specificaiton purposes.