

# TAPES FOR ELECTRICAL & ELECTRONIC EQUIPMENT





# GTG MANUFACTURING SDN. BHD. (968289-M)

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# Polyimide adhesive tape

# No.360 Series

# Heat-resistant electrical insulation.

Widely used in a variety of applications, such as heat-resistant electrical insulation, heat-resistant masking, component mounting reflow processes, and the manufacturing processes of various types of electronic components.

# Features

- Offers superior electrical insulation properties.Offers superior dimension stability.
- Offers superior heat resistance.
- Available in long lengths.

# Applications

- •Heat-resistant masking.
- Heat-resistant electrical insulation.

# Structure







# Line-up

B. J	Thickn	ess (mm)	0	0.1	
Product No.	Total	(Backing)	Standard length (m)	Color	
N = 2001 II	0.060	(0.025)	20	Light Amber Brown	
No.360UL	0.090	(0.050)	20		
N= 260A	0.053	(0.025)	- 20	Light Amber Brown	
No.360A	0.080	(0.050)	20	Light Amber Brown	

# Properties

Product No.	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
N - 000111	5.4	145	65	8.0	4.00
No.360UL	5.4	250	65	11.0	1.00
N . 000 A	4.0	145	65	8.0	4.00
No.360A	4.4	250	65	11.0	1.00

● UL 510 Flame Retardant • E34833



Fluoroplastic adhesive tape

# No.903UL / No.923UT

# Single-coated fluoroplastic tape equipped with a wide array of features.

No.903UL consists of a polytetratfluoroethylene (PTFE) film base coated on one side (treated side) with heat-resistant silicone adhesive. The tape offers resistance to heat and chemicals as well as an abundance of superior properties such as excellent electrical properties, non-tackiness and low coefficient of friction.

Structure

■No.903UL

■No.923UT



# No.185 / No.188UL

# Super strong electrical insulation tape that offers reliable adherence.

No.185 is a heat-resistant adhesive tape featuring superior physical strength and electrical insulation properties. No.188UL is a heat-resistant electrical insulation tape that offers superior heat resistance. mechanical strength and flame retardancy (UL certified).

# Features

- UL 510 Flame Retardant certified.
- Applied in the same manner as ordinary tape; realizes smooth wrapping, bundling and sealing.
- Offers superior flame retardancy.
- Uses class H insulation materials.
- ●Environment-friendly product conforms to Notification No.20 of the Japanese Ministry of Health, Labour and Welfare.
- ●No.923UT is only 0.04mm thick and does not take space.

# Applications

- Heat-resistant electrical insulation.
- ●Heat seals. ●Sliding material.
- Prevents tacky material from adhering.

# Line-up

Product No.	Thickness (mm)	Width (mm)	Standard length (m)
No.903UL 0.08, 0.13, 0.18, 0.23		5, 9, 10, 13, 15, 18, 19, 20, 22, 25, 30, 38, 40, 50, 75, 80, 100, 150, 200, 250, 300, 350, 400, 450	10
No.923UT	0.04	10, 13, 19, 25, 30, 38, 50, 75, 100, 125, 150, 200	5,10

## ■ UL 510 Flame Retardant • E34833

# Features

Single- surface treated

Single- surface treated

Silicone adhesive

- Offers superior physical strength and electrical insulation
- Offers superior thermal insulation.
- Thermosetting properties offer enhanced solvent and wax resistance by heating.
- Heating significantly increases adhesive strength.

# Applications

- Outer and interlaminar insulation for heat-resistant transformers.
- Covering of parts.
- Outer insulation for and bundling of coils.

# Structure ●No.185 rmosetting rubber adhesive Glass cloth ■No.188UL Silicone adhesive

Glass cloth

- Flame Retardant Silicone adhesive

# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
No.185	0.170 (0.130)	20	White	7.5	500	8	3.0	0.8 or more
No.188UL	0.180 (0.130)	33	White	6.7	600	5	3.5	0.96

●No.188UL(UL 510 Flame Retardant E34833)

Fluoroplastic adhesive tape

# No.903-T

# Fluoroplastic tape with release liner that facilitates work.

No.903-T is a polytetratfluoroethylene adhesive tape with a polyester liner. The tape is provided with various features such as electrical properties and facilitates work such as punching and application.

Glass-cloth adhesive tape

# ST-HG-T

# Flame-retardant tape with superior heat resistance and adherence.

Structure

ST-HG-T is a heat-resistant electrical insulation tape consisting of glass cloth coated with silicone adhesive

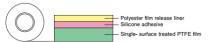
# Features

- Offers superior punchability.
- Easy to apply.
- Provided with polyester film release liner.

# Applications

- Heat-resistant electrical insulation.
- ●Heat seals. ●Sliding material.
- Prevents tacky material from adhering.

# Structure



# Features

- Provides superior physical and mechanical strengths.
- Special satin weave glass-cloth backing offers superior adherence to substrates.
- Offers heat-resistance and enhances adhesive strength when heated.
- Offers superior flame retardancy (UL 510 Flame Retardant certified).

- Heat-resistant termination and bundling of coils.
- Heat-resistant outer insulation and protection of parts.

# Applications

# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Breakdown voltage (kV)	Electrolytic corrosion factor
ST-HG-T	0.19 (0.12)	20	White	8.0	600	3.0	0.95 or more

●UL 510 Flame Retardant E64170

# Line-up

Product No.	Туре	Thickness (mm)	Width (mm)	Standard length (m)	
		0.08			
No.903-T	With Polyester	0.13	25 50 75 100 150 200 250 500	10	
NO.903-1	release liner	0.18	25, 50, 75, 100, 150, 200, 250, 500		
		0.23			



Nomex adhesive tane

# No.380 / No.386UL

# Stable electrical insulation properties at high temperatures.

Structure

●No.380

●No.386UL

Nomex that provides superior heat-resistance is used as the backing. Very practical for electrical insulation and battery electrode insulation that require heat resistance. No. 386UL is a UL certified tape. "Nomex is a registered trademark of DuPort



Polypropylene adhesive tape

# No.370 Series

# Polypropylene adhesive tape with superior solvent resistance.

Structure

Tape developed to maintain insulation properties inside electronic components using organic solvents such as capacitors and batteries is equipped with a polypropylene film backing with superior solvent resistance. The tape is ideal for fixing of aluminum electrolytic capacitor elements and lithium ion secondary batteries.

# Features

- Offers superior electrical insulation.
- Offers superior flame retardancy.
- Offers superior heat resistance.
- Available in long lengths (up to 300m).

# Applications

- Outer insulation and termination of coils.
- Heat-resistant electrical insulation.
- Battery electrode insulation.

# Properties

	Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
Γ	No.380	0.100 (0.050)	50	White -	8.0	80	10	3.0	0.95 or more
ı		0.130 (0.075)			7.5	140	10	3.5	0.95 or more
	No.386UL	0.120 (0.050)	50	White	6.5	80	10	3.0	0.9 or more
L	NO.300UL	0.140 (0.075)	50	vvriite	6.5	140	10	3.5	U.9 or more

●No.386UL(UL 510 Flame Retardant E34833)

# Features

- Offers superior electrical insulation.
- Offers superior solvent resistance.

# Acrylic adhesive Polypropylene

# Applications

- •Fixing of aluminum electrolytic capacitor elements.
- Fixing of lithium ion secondary battery elements.

# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/10mm)	Tensile strength (N/10mm)	Elongation (%)
No.3703F	0.055 (0.030)	400, 4000, 8000	Transparent	3.5	40	180
No.3703DF	0.055 (0.030)	200, 400	Light green	3.5	40	180



# PPS adhesive tape

# No.320A Series

For structural materials of chip electrolytic capacitors and secondary batteries.

Employing heat-resistant Nomex as the backing, Nitto No.403FP is used as electrical insulation and for insulation of battery electrodes requiring heat resistance.

Structure

\*Nomex is a registered trademark of DuPont



# Special film heat-resistant light adhesion tape/sheet

# T-APN10

Heat-resistant light adhesion adhesive tape with special film backing that allows easy removal of the applied tape even after heated.

This light adhesion tape with superior heat-resistance withstands various heating processes used for printed circuit board or device component production.

- Release liner - Acrylic adhesive

Special polyester film, Polyester film

**%T-APN10:PEN film** 

Structure

# Features

- Offers superior electrical insulation.
- Offers superior dimension stability.
- Offers superior heat resistance.

# Applications

- Fixing of aluminum electrolytic capacitor elements
- Insulation of electrodes in lithium ion secondary batteries.



Acrylic adhesive

# Line-up

	Thickn	ess (mm)	Standard length(m)	Color	
Product No.	Total	(Backing)	Standard length(m)		
No.320A#16	0.035	(0.016)	20	Cream	
No.320A	0.053	(0.025)	20	Cream	

# Properties

Product No.	Peel adhesion (N/10mm)	Tensile strength (N/10mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
No.320A#16	3.0	34	64	3.7	1.00
No.320A	3.3	55	60	5.5	1.00

# Features

- Offers very light adhesion that allows easy removal.
- Even after heated, leaves no adhesive residue when removed and exhibits superior dimension stability.
- ●Long shelf life up to 6 months at room temperature.
- Offers superior punchability.

# Applications

- Reinforcement and masking for ultra-thin circuits (thin copper coated base & copper foils).
- Protection during through-hole drilling.
- Suitable for masking during conductive paste filling.

# Properties

Troperios								
Product No.	Thickness (mm) * Total (Backing)	Standard length (m)	Color	Peel adhesion (N/20mm)				
T-APN10	0.020 (0.016)	200	Transparent	0.20				

<sup>\*</sup>Excluding the release liner



Polyester adhesive tape

# No.31 Series / No.315

# Used for outer/interlaminar insulation of transformers and coils.

Tape developed for outer/interlaminar insulation of transformers and coils. Nitto has a wide lineup of backing thicknesses and adhesive types/colors; the tapes can be used for various applications. Nitto is also proud of its abundant experience with tapes for electronic equipment insulation.



Polyester adhesive tape

# No.336 / No.337

Thin backing and thick adhesive layer make No.336/No.337 adhesive tape deal for plating masking.

Structure

Thin backing and thick adhesive layer makes the tape ideal for heat-resistant plating masking. Almost no plating solution leaks in so it exhibits high reliability.

# Features

- Offers superior electrical insulation.
- Offers superior dimension stability.
- Offers superior heat resistance.
- Narrow width processing is available.
- Available in long lengths.

# Applications

•Electrical insulation of transformers and coils.



# ●No.31B ●No.31C - Acrylic adhesive ●No.31RH Polyester film ●No.31D ■No.31E - Rubber adhesive ●No.315

Structure

Thermosetting rubber adhesive

# Features

- •Film is thin and offers excellent flexibility.
- •Has thick adhesive layer so almost no plating solution leaks in.
- \*Resistability of plating solution. Backing will be changed weaker when it soaked in heated alkali solution by long hours using.



# Applications

Heat-resistant masking.

# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (MPa)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
No.336	0.060 (0.025)	33	Transparent, Blue	6.4	130	80	5.4	
140.330	0.080 (0.050)			6.6	170	100		1.00
No.337	0.100 (0.025)	33	Blue	6.2	130	80	5.5	1.00

# Properties

Product No.	Thickne Total	ess (mm) (Backing)	Standard length(m) [Core diameter(mm)]	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
No.31B	0.053	(0.025)	50 [75φ]	Transparent	5.5	100	110	5.5	
N0.31D	0.080	(0.050)	50[/5φ]	Hansparent	7.5	196	130	8.0	
N. 040	0.053	(0.025)	50[75φ]	White, Yellow, Red, Green.	5.5	100	110	7.0	
No.31C	0.080	(0.050)	30[734]	Blue,Black	7.5	196	130	11.0	
N. OARU	0.053	(0.025)	solve .	Transparent	6.5	100	110	5.5	
No.31RH	0.053	(0.025)	50 [75φ]	White,Red, Green,Blue, Black	6.5	100	110	7.0	1.00
No.31D	0.053	(0.025)	50 [75φ]	Transparent	5.5	100	110	5.5	1.00
NO.31D	0.080	(0.050)	50[/5φ]	Transparent	7.0	196	130	8.0	
No.31E	0.053	(0.025)	50 [75φ]	White, Yellow, Red, Blue, Black	5.5	100	110	7.0	
	0.060 (0.025)	T	12.0	100	110	5.5			
No.315	0.085	(0.050)	50[75 <sub>4</sub> ]	Transparent	14.5	196	130	8.0	
	0.060	(0.025)	— 50【75φ】 —	Velleri	12.0	100	110	7.0	
	0.085	(0.050)	]	Yellow	14.5	196	130	11.0	

Flame-retardant polyester adhesive tape

# NO3161FR Series

Flame-retardant polyester tape is UL-510FR certified at 130°C temperature rating.

Electrical insulation adhesive tape consists of polyester film backing, coated with flame-retardant acrylic

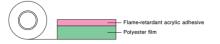
# Features

- Offers superior electrical insulation.
- Does not contain Polybrominated Biphenyl or Polybrominated Diphenylethers to comply with RoHS regulations.

# Applications

- Outer/interlaminar insulation of power switching transformers and ordinary power transformers.
- Outer/interlaminar insulation for the high frequency chalk coil, high voltage transformer.

# Structure



# Properties

Product No.	Thicknot Total	ess (mm) (Backing)	Standard length(m) [Core diameter(mm)]	Color	Peel adhesion (N/19mm)	strength	Elongation (%)		Electrolytic corrosion factor
NONCAPPA	0.054	(0.005)	50/75.1	Milky	0.0	400	440	6.0 7.0	
NO3161FR1	0.054	(0.025)		White, Yellow, Red, Green, Blue, Black	8.0	100	110		1.00
NO3161FR2	0.080	(0.050)	50 <b>【</b> 75φ】	Milky	9.0	196	130	8.0	1.00

●UL 510 Flame Retardant temperature rating: 130°C E34833



# No.340 / No.341 Series, No.343B

Structure

High-electrical insulation and tracking-resistant properties that contribute to increasing the compactness of coils and transformers.

High-insulation adhesive tape with an acrylic adhesive applied to a composite substrate of nonwoven fabric and polyester film. This can serve not only as a winding stopper for the exterior of coils but also contribute to greater transformer design freedom and more compact transformers.

Excellent wear resistance.

Excellent self-lubricating properties.

Extremely high impact resistance; particularly excellent chemical resistance among plastics.

Ultrahigh-molecular-weight polyethylene adhesive tape

# No.443 / No.4430

Adhesive tape with excellent impact resistance, wear resistance, and self-lubricating capabilities.

Pressure-sensitive adhesive tape based ultrahigh-molecular-weight polyethylene film with release liner. Offers extremely high impact resistance, superior wear resistance and self-lubricating properties. Enhanced adhesive strength is realized by incorporating adhesive technology into film with excellent chemical resistance.

# Features

- Adheres well to coils, etc., and offers superior flexibility.
- Heating increases adhesive strength.
- Offers superior electrical insulation
- ●Complies with PLC-O of UL-746A (CTI: 600U or more).
- Conforms to CTI grade I of IEC-950.

# Applications

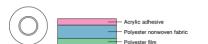
- Outer insulation and termination of coils.
- Barrier insulation of transformers and coils.

# Properties

Product No.	Thickness (m Total (Bac	nm) cking)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)	Electrolytic corrosion factor
No.340	0.240 (0.1	180)	50	White, Blue	7.5	170	60	5.5	0.98 or more
No.341F	0.420 (0.3	350)	50,200	White, Blue	6.0	120	60	5.5	0.98 or more
No.341S	0.250 (0.1	160)	100	White, Blue	10.5	130	100	9.0	0.98 or more
No.343B	0.420 (0.3	370)	30	White	17.0	205	33	8.0	0.98 or more

●No.343B(UL 510 Flame Retardant temperature rating: 130°C, CTI PLC of O E34833)

# Features



# Size

Bro	duct No.	Thickne	ess (mm)	Width (mm)	Standard length	
FIO	duct No.	Total	Substrate	width(mm)	(m)	
No.44		0.27, 0.30, 0.37, 0.42, 0.47	0.1, 0.13, 0.2, 0.25, 0.3	300.350	10,30,50	
No.44	13 (Black)	0.57, 0.67	0.4, 0.5	000,000	10,30	
No.44 No.44	130 130 (Black)	0.16, 0.23, 0.28	0.13, 0.2, 0.25	13, 19, 25, 50, 75, 100, 300, 350	10,30,50	

# Structure

- Filler for various types of products; wrapping of slide surfaces/guide rails of label applicators.
- Wrapping of slide surfaces/guide rails of
- automatic vending machines.
- Washer lining.

Applications



# ●No.4430



# Properties

Product No.	Thickne	ss(mm)	Peel adhesion	Tensile strength	Elongation	Surface resistance
Floduct No.	Total	Substrate	(N/20mm)	(MPa)	(%)	(Ω)
No.443	0.00	0.13	17.1	55.3	400	10 <sup>16</sup>
No.443 (Black)	0.30		14.5	51.3	380	10 <sup>6</sup>
No.4430	0.40	0.40	10.9	55.3	400	10 <sup>16</sup>
No.4430 (Black)	0.16	0.13	10.6	51.3	380	10 <sup>6</sup>

Composite adhesive tape

# No.345EG

Low-VOC adhesive tape with superior hand-cuttability and sound deadening qualities.

Sound deadening tape coated with low-VOC acrylic adhesive on our original special carrier of nonwoven fabric sandwiched between polyethylene(PE) films.

Self-fusing tape

# No.11 / No.15 / No.66 / No.660

Rubber-based self-fusing tapes that have excellent electrical properties.

No.11,15 are butyl rubber self-fusing tapes that do not cause metal corrosion. No.66, 660 are silicone rubber type self-fusing tapes that are heat and weather resistant.

# Features

- Superior workability due to its superior hand cuttability
- Superior sound deadening qualities due to the use of nonwoven fabric with superior cushioning
- Ouse of low-VOC adhesive as an environmental measure

# Applications

For wiring harnesses and sound deadening

# Structure



# Features

- Excellent in the electrical property, ozone resistance and weather resistance

Do not cause metal corrosion (No.11,15) ●Excellent heat resistance (No.66, 660)

# Applications

- Treating/connecting the ends of electrical cables. (No.11.15)
- Insulation banding for wire harness in the engine area of the car. (No.66, 660)

# Structure

■No 11



●No.15



# ●No.66, 660



# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	90°peel adhesion	Tensile strength (N/19mm)	Elongation (%)
No.345EG	0.250 (0.210)	14	Gray	5	70	10

# Properties

Product No.	Thickness (mm) *	Width (mm)	Standard length (m)	Color	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)
No.11	0.5	19	10	Black	30	500	20
No.15	0.5	19	10	Black	30	500	20
No.66	0.5	19, 25	15	Red brown	70	500	20
No.660	0.22	19	15	Red brown	25	400	13

<sup>\*</sup>Excluding the release liner



Acetate adhesive tane

# No.5 / No.5EG / No.151UL / No.153 / No.155 / No.156A

# Acetate cloth adhesive tape offers superior heat resistance and flexibility.

Electrical insulation tape consists of acetate cloth coated with acrylic or rubber adhesive. No.156A and No.151U. are UL-certified flame-retardant adhesive tape, and is used insulating electrical and electronic equipment, protective insulation of wire harmesses and binding.



Cotton adhesive tape

# No.7A

# Ideal for outer insulation and termination of coils.

Adhesive tape designed to facilitate work consists of cotton cloth coated with acrylic adhesive. Ideal for outer insulation and termination of coils.

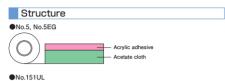
Structure

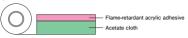
# Features

- ●Easy to work with.
- Superior flexibility makes it ideal for binding uneven electrical wiring.
- Offers superior corrossion resistance.
- Environment-friendly tape of low VOC.(No.5EG)
- ●No.151UL is halogen-free.
- ●Low VOC strong adhesive tape.(No.153)

# Applications

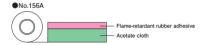
- Outer insulation and termination of coils.
- ●For bonding wire harness on home appliances.(No.151UL)











# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)
No.5	0.23 (0.18)	30	White, Black	6.0	120	20	3.0
No.5EG	0.23 (0.18)	20	Black	5.0	120	20	3.0
No.151UL	0.23 (0.18)	50	Black	5.0	120	20	3.0
No.153	0.21 (0.18)	50	White, Black	10.0	120	20	3.0
No.155	0.23 (0.18)	30	Black	8.0	130	20	3.0
No.156A	0.25 (0.18)	30	White, Black	8.0	130	20	2.0

●No.151UL(UL 50 Flame Retardant E64170), No.156A(UL 510 Flame Retardant E34833)

# Features

- ●Easy to work with.
- •Flexible and is easy to cut straight.

# Applications

Outer insulation and termination of coils.

# Acrylic adhesive Cotton cloth

# Properties

Product No.	Thickness (mm) Total (Backing)	Standard length(m) [Core diameter(mm)]	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)
No.7A	0.22 (0.15)	30[ 75φ]	White	3.5	200	7.0	1.0

# Vinyl adhesive tape

# No.223S

# A standard tape meeting the UL standards.

This vinyl adhesive tape is used as a flame-retardant insulation of degaussing coils. The tape meets standards of the American UL (Underwritters Laboratories) and the Canadian CSA (Canadian Standards Association) and contributes to enhancing safety of electronic equipment and products.

# Features

- Offers superior flame-retardant and electrical insulation properties.
- Can be used for wrapping corners of degaussing coils.
- ●UL 510 Flame Retardant and CSA certified.

# Structure



# Applications

•Electrical insulation and binding of CRT degaussing coils.

# Properties

Fluberties								
	Product No.	Thickness (mm)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)	Breakdown voltage (kV)
	No.223S	0.190	20	White, Gray, Yellow, Red, Green, Blue, Black	5.64	73.5	280	11.22

- ●UL 510 Flame Retardant E34833
- ●CSA C22.2 No.197-M1983 028317\_0\_000



Non-halogen adhesive tape

# No.2400 / No.2450

# Realizes same bundling properties as PVC without halogen.

Nitto has developed an adhesive tape that offers the same strength and user-friendliness as PVC plus better heat resistance through a combination of non-halogen base film and adhesive.

# 0

Paper adhesive tape for shipping radial electronic parts

# No.744S

# Plays a huge role in radial taping of electronic components with lead pins.

No.744S is used for radial taping of electronic components with lead-in wire for shipment. Nitto offers a full lineup of adhesive tapes for applications ranging from small to large components, and largely contributes to automation and enhancing reliability of the component insertion process.

# Features

- Same colors of PVC are available in Non-halogen, and can maintain the same color identification.
- •Tape design offers same banding performance as PVC and is just as easy to use.
- Offers improved long-term heat resistance and fogging properties that are the disadvantages of PVC.

# Structure



# Features

- Offers superior component holding.
- Facilitates taping.
- Available in long lengths.



# Applications

Radial taping of electronic components with lead pins.

# Properties

1 Topel des						
Product No.	Thickness (mm)	Standard length (m)	Color	Pulling-out force (N/10mm)	Tensile strength (N/15mm)	Elongation (%)
No.744S	0.180	500, 1000, 3000	Cream	80	130	16

# Applications

•For banding wire harness and identification.

# Properties

Product No.	Thickness (mm)	Standard length (m)	Color	Peel adhesion (N/19mm)		Tensile strength (N/19mm)	Elongation (%)
No.2400	0.11	25	Black	Stainless steel plate	4.12	27.5	365
(For general banding	0.11			Own backing	4.95		303
No.2450	0.11 25	05	40	Stainless steel plate	4.36	07.5	000
(For identification		12 colors	Own backing	5.42	27.5	366	



Paper adhesive tape for electronic parts processes

# No.7464

# For manufacturing process of electronic components with lead pins.

No 746 Series tapes can be used for general electrical insulation applications as well as for holding and fixing lead terminals for the process for electronic components with lead type. Because it uses a flexible backing, the tape offers superior user-friendliness and long-term preservation for taped components.



Paper adhesive tape for shipping axial electronic parts

# No.749R

# Plays a huge role in axial taping of electronic components with lead pins.

Structure

No.749R is used for axial taping of electronic components with lead-in wire for shipment. Nitto adhesive tapes largely contribute to automation and enhanced reliability of the component insertion process for component sizes ranging from small to large.

# Features

# Offers superior component holding.

•Flexible backing offers superior taping.

Offers superior long-term preservation for taped components.

# Structure Thermosetting rubber adhesive Crepo paper

# Applications

 Holding and fixing of leads during the manufacturing process for capacitors, etc.

# Properties

Product No.	Thickness (mm)	Standard length	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)
No.7464	0.150	500, 3000	Cream	3.4	64	12

# Features

Offers superior component holding.

•Facilitates taping.

# Applications

•Axial taping of electronic components with lead pins.

# Rubber adhesive Flat paper

# Properties

Product No.	Thickness (mm)	Standard length (m)	Color	Peel adhesion (N/19mm)	Tensile strength (N/19mm)	Elongation (%)				
No.749R	0.140	500, 1000, 3000	Yellow, Blue, White	11.0	190	4				



Polyester nonwoven fabric thermosetting bonding tape/sheet

# **P-EF Series**

Thermosetting bonding sheets with superior sealing properties that offer easy taping.

P-EF Series is a thermosetting bonding sheet using polyester nonwoven fabric impregnated with epoxy resin.

# FB-ML4

Backing-less thermoplastic bonding tape/sheet

# FB-ML4·FB-ML80

Thermoplastic bonding tape that strongly and rapidly bonds in a few seconds.

FB-M Series is a thermoplastic bonding tape with superior and quick bonding properties for various materials, and is storable at room temperature.

# Features

- ●Long shelf life up to 3 months at a temperature under 20℃ (P-EF50).
- Containing a sufficient amount of resin, P-EF11 provides a just the right amount of resin flow.
- The surface adhesive layer provides increased workability (P-EF50).
- Their sufficient flexibility provides superior adherence to substrates.

# Applications

- Adhesion of a HIC metal board to its plastic case.
- Outer insulation and protection of coils.

# Structure ●P-EF11 - Epoxy resin - Polyester nonwoven fabric - Epoxy resin - Release liner - Epoxy resin ●P-EF50 - Acrylic adhesive - Epoxy resin Polyester nonwoven fabric

# Properties

	Donatura No.	Thickness*	Thickness* Standard length (mm) (m)	Color	Oriotal Strongth	Bonding condition (		
ı	Product No.	(mm)				Temperature (°C)	Time (min.)	Storage condition
	P-EF11	0.3, 0.5	20	White	1400	100-140	60-30	Sealed and stored at 10℃ or less
	P-EF50	0.18	30	Milky	1400	120-180	60-30	Sealed and stored at 20°C or less

<sup>\*</sup>Excluding the release liner

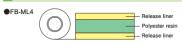
# Features

- Bonds in a few seconds.
- •ML4 offers superior bond strength for PET, PI, PC, ABS, PPO and PVC; PI, PC, ABS, and PVC; ML80 for PVC, PET-G, and
- ●Long shelf life up to 6 months at a room temperature.

# Applications

- Fixing modules of smart cards and small memory cards.
- Fixing plastic chasis to FPC.
- Bonding PET stiffeners to FPC.
- Bonding metal components with plastic chasis.

# Structure





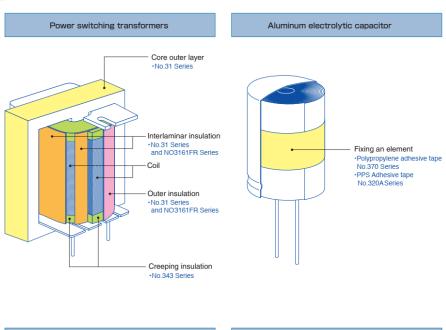
# Properties

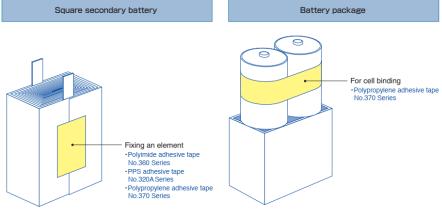
Product No.	Thickness* (mm)	Standard length (m)	Color	Shear strength (N/cm²)	Bonding condition (	Storage condition			
					Temperature (℃)	Time (sec.)	Storage Condition		
FB-ML4	0.05, 0.07	50	Semi-transparent	1600	130-	5-	Room temperature		
FB-ML80	0.05	100	Semi-transparent	1600	120-	2-	Room temperature		

<sup>\*</sup>Excluding the release liner

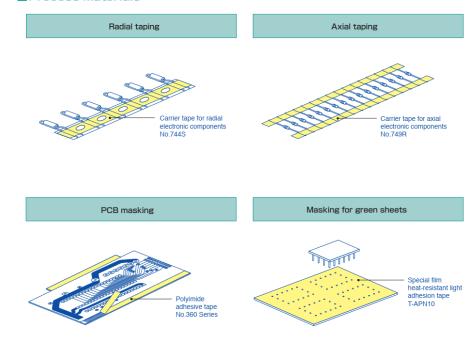
# **Applications**

# ■ Structural materials





# ■ Process materials



# **Products list**

Product	Product No.	Thickness (mm)	Standard length(m)	Color	Page
Polyimide adhesive tape	No.360UL	0.060, 0.090	20	Light Amber Brown	2
rolylillide adilesive tape	No.360A	0.053, 0.080	20	Light Amber Brown	2
	No.903UL	0.08 ~ 0.23	10	-	3
Fluoroplastic adhesive tape (NITOFLON*)	No.923UT	0.04	10	-	3
	No.903-T	0.08 ~ 0.23	5, 10	-	3
	No.185	0.170	20	White	4
Glass-cloth adhesive tape	No.188UL	0.180	33	White	4
	ST-HG-T	0.19	20	White	4
Name allowing to a	No.380	0.11, 0.13	50	White	5
Nomex adhesive tape	No.386UL	0.120, 0.140	50	White	5
	No.320A#16	0.035	20	Cream	5
PPS adhesive tape	No.320A	0.053	20	Cream	5
Polypropylene adhesive tape	No.3703F	0.055	400, 4000, 8000	Transparent	6
r dispropsiene adnesive tape	No.3703DF	0.055	200, 400	Light green	6
Special film heat-resistant light adhesion tape/sheet	T-APN10	0.020	200	Transparent	6
	No.31B	0.053, 0.080	30, 50	Transparent	7
	No.31C	0.053, 0.080	30, 50	Various colors	7
	No.31RH	0.053	30, 50	Various colors	7
Polaritari dhasha tara	No.31D	0.053, 0.080	30, 50	Transparent	7
Polyester adhesive tape	No.31E	0.053	30, 50	Various colors	7
	No.315	0.060, 0.085	20, 50	Transparent, Yellow	7
	No.336	0.060, 0.080	33	Transparent, Yellow	8
	No.337	0.100	33	Blue	8
Flame-retardant polyester	NO3161FR1	0.054	30, 50	Various colors	8
adhesive tape	NO3161FR2	0.080	30, 50	Milky	8
	No.340	0.24	50	White, Blue	9
	No.341F	0.42	50, 200	White, Yellow, Red, Blue	9
Composite adhesive tape	No.341S	0.25	100	White, Yellow, Blue	9
	No.343B	0.42	30	White	9
	No.345EG	0.25	14	Gray	9

Product	Product No.	Thickness (mm)	Standard length(m)	Color	Page
	No.443	0.27, 0.30, 0.37, 0.42, 0.47	10, 30, 50	White, Black	10
Ultrahigh-molecular-weight polyethylene adhesive tape		0.57, 0.67	10, 30	White, Black	10
	No.4430	0.16, 0.23, 0.28	10, 30, 50	White, Black	10
	No.11	0.5	10	Black	10
Self-fusing tape	No.15	0.5	10	Black	10
Sell-lusling tape	No.66	0.5	15	Red brown	10
	No.660	0.22	15	Red brown	10
	No.5	0.23	30	White, Black	11
	No.5EG	0.23	20	Black	11
	No.151UL	0.23	50	Black	11
Acetate adhesive tape	No.153	0.21	50	White, Black	11
	No.155	0.23	30	Black	11
	No.156A	0.25	30	White, Black	11
Cotton adhesive tape	No.7A	0.22	30	White	12
Vinyl adhesive tape	No.223S	0.19	20	Various colors	12
Non-halogen adhesive tape	No.2400	0.11	25	Black	13
Non-halogen adhesive tape	No.2450	0.11	25	12 colors	13
Paper adhesive tape for electronic parts processes	No.7464	0.150	500, 3000	Cream	13
Paper adhesive tape for shipping radial electronic parts	No.744S	0.180	500, 1000, 3000	Cream	14
Paper adhesive tape for shipping axial electronic parts	No.749R	0.140	500, 1000, 3000	Yellow, Blue, White	14
Polyester nonwoven fabric	P-EF11	0.3, 0.5	20	White	15
thermosetting bonding tape/sheet	P-EF50	0.18	30	Milky	15
Backing-less thermoplastic	FB-ML4	0.05, 0.07	50	Semi-transparent	16
bonding tape/sheet	FB-ML80	0.05	100	Semi-transparent	16

19 2:

# **Technical Support Centers**

# **Product Information Contacts**

•About Products •Catalog and Data Sheet Delivery •Various Available Product Samples •Practical Evaluations •Other

# TCAT

# Tape Customer Assistant Team

Supported Products High adhesion double-coated tapes,

Double-coated adhesive tapes, Metal foil tapes

Supported Sample Sizes: A4, specified width (small roll)



# TFOX

# Tape and Foam Expert Support Center

Supported Products Sealing materials (Foam materials, Reinforcing materials,

Vibration-damping materials), Waterproof and airproof tapes, Masking tapes for painting, Vinyl tapes, Bar code labels



# TDOC

# Technical Dock (Doctor)

: Surface protective films, Masking tapes for plating Supported Products

Supported Sample Sizes: Specified width (small roll, approx. 20m)



# **TCOW**

# Technical Support for Customer of World

Supported Products Electrical insulating tapes, Tapes for transporting and

manufacturing electronic components, Semiconductor wafer protection and fixing tapes



# **EYES**

# Engineering Plastics Your Enhancement System

Supported Products : Fluoroplastic products (sheets, tapes, filters), Ultra-high

molecular weight polyethylene products (Low-friction tape,

Air permeability sheets)

Supported Sample Sizes: A4, etc.



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