ipg

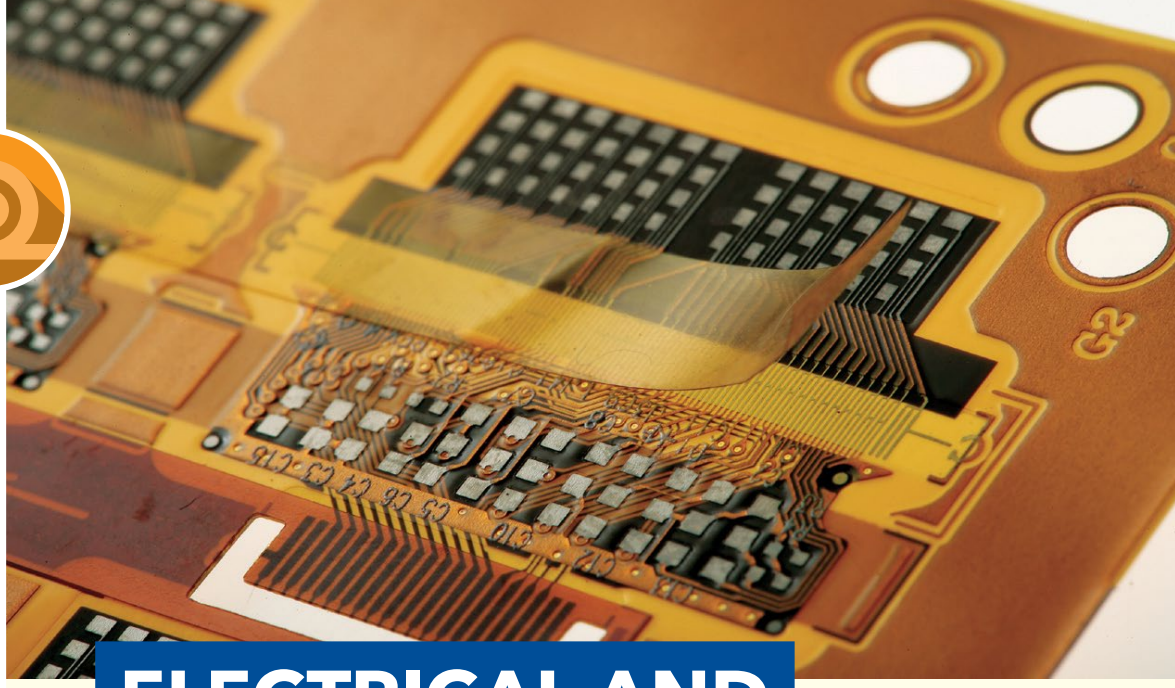
i tape



ELECTRICAL AND ELECTRONIC TAPES



i tape



ELECTRICAL AND ELECTRONIC TAPES

IPG's Electrical and Electronic Tapes are available with a wide range of backings and adhesive systems to meet the demanding application requirements of the electrical, electronic, and aerospace industries. These engineered products are manufactured under the strictest standards to deliver the highest level of performance and reliability. Many IPG® Electrical Insulation Tapes are UL listed (File #OANZ2. E20780) and CSA Certified (File #LR94980). With the most comprehensive product line in the industry, IPG has the ideal solution to your most demanding applications.

MARKETS

- Aerospace
- Electrical Electronic
- General Manufacturing
- Transportation



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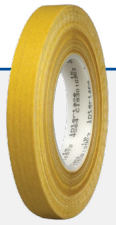
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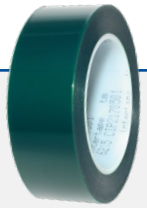
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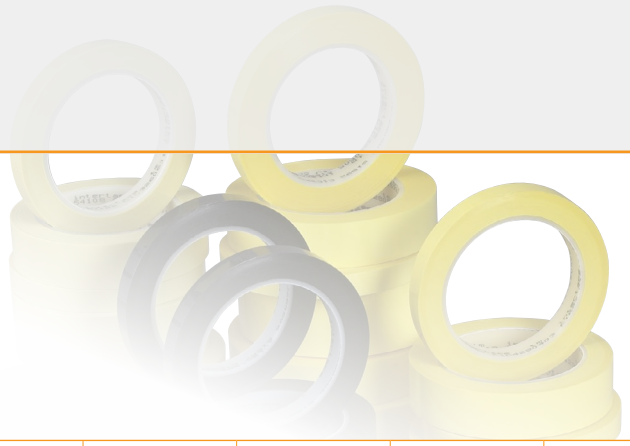
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IPG | 100 Paramount Drive | Suite 300 | Sarasota, FL 34232

POLYESTER FILMS



IPG's Polyester Film Tape provides excellent conformability and high dielectric strength per mil of thickness.

ACRYLIC & ACRYLIC THERMOSETTING

STYLE	DESCRIPTION	POLYESTER BACKING	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
51589	Solvent resistant. Excellent long-term aging characteristics. Non Thermosetting. Clear. Adheres to spec L-T100 B Type I.	1.0 (0.025)	2.2 (0.056)	35 (3.8)	25 (44)	5,000	130
54113	High temperature shear, abrasion and puncture resistant. Ideal for film wrap capacitors and where maximum insulation build up is required. Thermosetting acrylic. Clear, Yellow.	1.0 (0.025)	2.4 (0.061)	45 (4.9)	25 (44)	5,000	130
54143	High temperature shear and abrasion resistant. Ideal for film wrap capacitors and where maximum insulation build up is required. Thermosetting acrylic. Clear.	1.4 (0.035)	3.0 (0.076)	50 (5.5)	38 (67)	6,000	130

Elongation 100% • Abrasion and moisture resistant
Applications: coil wrapping, anchoring, harnessing, holding, slot edging in transformers and motors

RUBBER THERMOSETTING

STYLE	DESCRIPTION	POLYESTER BACKING	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
51587	Resists chemicals and solvents when thermoset. Excellent electrical insulating properties. Yellow, Black. MIL–I–15126F Type MF 2.5.	1.0 (0.025)	2.2 (0.056)	50 (5.5)	25 (44)	5,000	130
51588	Resists chemicals and solvents when thermoset. Excellent electrical insulating properties. Clear. MIL–I–15126F Type MF 2.5.	1.0 (0.025)	2.2 (0.056)	50 (5.5)	25 (44)	5,000	130
51594	Resists chemicals and solvents when thermoset. Excellent electrical insulating properties. Ideal on fine gauge magnet wire. Lemon yellow.	1.0 (0.025)	2.0 (0.051)	45 (4.9)	25 (44)	5,000	130

Elongation 100% • Tough and conformable • Abrasion and moisture resistant • Excellent electrical insulating properties
Applications: coil wrapping, anchoring, harnessing, holding, insulating, tabbing and inter-layer insulation

CURED RUBBER

STYLE	DESCRIPTION	POLYESTER BACKING	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
54108	Excellent electrical insulating properties and high initial cure. Ideal for high shear resistance at elevated temperatures. Off-white.	1.0 (0.025)	2.4 (0.061)	50 (5.5)	25 (44)	5,000	130

POLYESTER LAMINATES

To meet a wide range of industrial needs, IPG offers two types of Polyester Laminate Tape. Paper/Polyester Laminates provide excellent bulk and stiffness in an easy-to-tear product. Polyester/ Non-Woven Laminates are puncture resistant, and highly conformable. They're available with acrylic adhesives for performance in higher temperature environments.

ACRYLIC

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
51595	Coil and transformer wrapping, anchoring, harnessing and outer-wrap for coils. Black, Natural.	3.5 (0.089) Polyester Nonwoven	4.5 (0.114)	50 (5.5)	30	30 (53)	5,000	155

Multi-purpose tape • Tear and puncture resistant • High tensile strength • Excellent dielectric strength
Applications: high volume coil wrapping, ground and barrier insulation, outer protective wrap for bobbin applications, coil end insulation anchoring leads and terminal boards

RUBBER THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4426	All-purpose electrical tape. Black, Natural.	4.0 (0.101) Polyester Rope Fiber	6.0 (0.150)	60 (6.6)	2	45 (79)	5,500	130
51596	Tear and puncture resistant. High tensile strength. Excellent dielectric strength. Black, Tan.	3.5 (0.089) Polyester Nonwoven	4.5 (0.114)	60 (6.6)	30	31.5 (55)	4,500	130
51580	Coil and transformer wrapping, anchoring, harnessing and outer-wrap for coils. Natural.	4.0 (0.101) Polyester Nonwoven	5.0 (0.127)	50 (5.5)	25	45 (79)	5,000	130
51245	Multi purpose, ideal for high volume coil wrapping applications, ground and barrier insulation, outer protective wrap for bobbin applications, coil end insulation anchoring leads and terminal board pads. Tan.	3.5 (0.089) Polyester Nonwoven	5.3 (0.134)	85 (9.3)	50	31.5 (55)	5,000	130

Excellent solvent resistance
Applications: slot edging, lead anchoring, coil wrapping, inter-phase/interlayer insulation



GLASS FILAMENT



The combination of polyester film with glass filament reinforcement delivers high tensile strength, making these tapes excellent for heavy duty bundling and insulation applications. The properties of our Glass Filament Polyester Film Tapes include superior resistance to chemicals, solvents and aging. All products average 5% elongation.

ACRYLIC & ACRYLIC THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
4237	Lead and saddle tie down, bundling motor and transformer coils and coil covering applications. Designed for oilfilled applications. Thermosetting acrylic. Transparent.	4.5 (0.114)	7.25 (0.18)	45.0 (4.9)	295 (516)	5,000	155
4238	Lead and saddle tie down, bundling motor and transformer coils and coil covering applications. Non Thermosetting. Transparent.	6.5 (0.165)	7.5 (0.190)	45.0 (4.9)	375 (657)	6,000	155
51597	Slot edging, holding, separating ground insulation, bundling and transformer coils. Non Thermosetting. Transparent.	5.5 (0.139)	6.5 (0.165)	40 .0(4.4)	250 (438)	5,000	155
4240	PET Film with bi-directional glass filament tape with acrylic adhesive for amorphous stack steel transformers	5.3 (0.13)	9.8 (0.25)	40.0 (4.38)	135 (236)	5,000	155

High tensile strength, conformable backing with aggressive adhesive for a variety of heavy duty insulating and holding applications • Resistant to chemicals, solvents and aging • Offers high dielectric strength and insulation resistance

RUBBER THERMOSETTING

STYLE	DESCRIPTION	POLYESTER GLASS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
51599 PV1	Lead and saddle tie down, bundling motor and transformer coils and coil covering applications. Natural.	5.0 (0.127)	7.0 (0.178)	60 (6.6)	350 (613)	5,000	130



GLASS CLOTH



When the situation calls for high heat resistance and tensile strength, Glass Cloth Tapes are ideal for many electrical insulation requirements. They offer outstanding flexibility and conformability. These tapes are unique in that they produce little edge fray and little to no dust. Choose from IPG Glass Cloth Tapes with thermosetting rubber, acrylic, or silicone adhesives.

RUBBER THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4616	High adhesion. Solvent and tear resistant. Coil insulation wrap, relay coverings, protective insulating wrap on solenoid coils, splicing. Black, White. MIL-T-4053B.	5.0 (0.127)	7.0 (0.178)	50 (5.5)	3	175 (306)	2,500	155

Woven fiberglass backing imparts high temperature resistance and thermal stability • Offers outstanding abrasion resistance for a large number of applications

ACRYLIC

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4617	Temperature resistant. Excellent puncture and abrasion resistance. White. MIL-I-15126F Type GFT. CID A-A-59770-4.	5.0 (0.127)	7.0 (0.178)	40 (4.4)	3	200 (350)	3,000	155

Inert, temperature resistant, high tensile strength backing with an acrylic adhesive • Combines high adhesion and strength with excellent puncture and abrasion resistance • Acrylic adhesive system provides outstanding resistance to oils, solvents and chemicals. • Excellent conformability remains flexible after cure
Applications: Inter-layer insulation, coil outer wraps, tie-downs, lead insulation and protection. Electrical motor and generator binding.

SILICONE THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4618	Resists edge fraying and rotting. Flexible and varnish absorbent. Solvent and abrasion resistant. Flame retardant. White. Meets UL-510. MIL–I–19166C.	5.0 (0.127)	7.0 (0.178)	45 (4.9)	3	185 (324)	2,500	200

High strength backing and heat resistant silicone adhesive for high temperature applications • Motor repair shops for bundling and banding heavy gauge magnet wire • Slot cell edge taping

ACETATE CLOTH



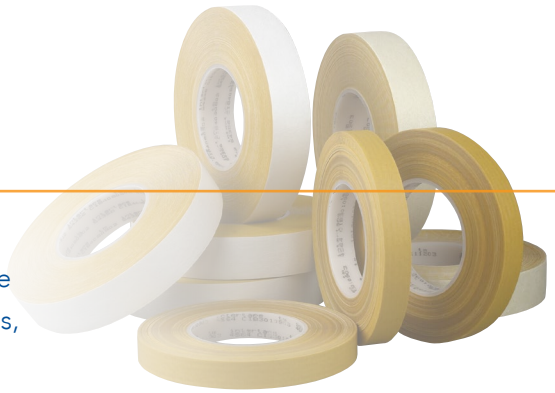
When you want the convenience of a hand-tearable tape with outstanding product features, IPG's Acetate Cloth Tapes are a smart choice. The acetate cloth backing and a thermosetting rubber adhesive system provide high adhesion with conformability, printability, and excellent insulating properties.

RUBBER THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4560	High adhesion. Will accept varnish impregnation. White.	6.0 (0.152)	7.0 (0.178)	50 (5.5)	15	40 (70)	2,000	130

Applications: coil wrapping, inter-layer insulation, tabbing

SPECIALTY ELECTRICAL



High voltage insulation applications put extra demands on tape. IPG offers a line of Specialty Electrical Tapes with unique characteristics suited to these situations, including zone coating that allows for complete varnish impregnation.

ACRYLIC & ACRYLIC THERMOSETTING

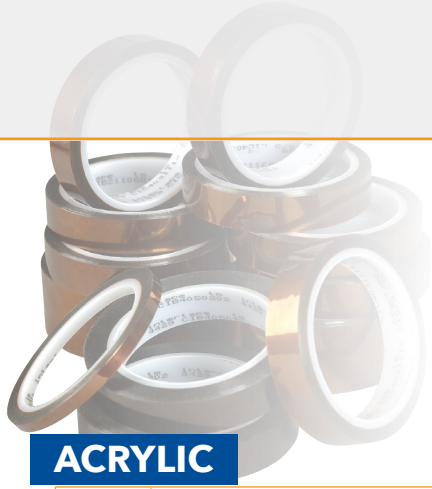
STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
56228	2.0 mil Nomex® backing. Thermosetting acrylic. Off-white. Meets UL-510.	2.0 (0.050)	3.5 (0.089)	40 (4.4)	8	25 (44)	2,500	155

Nomex® is a registered trademark of EI Dupont de Nemours

ACRYLIC ZONE-COATED

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	%	lbs/in (N/cm)	Total Volts	°C
4564	2.4 mil polyester fleece backing. Non Thermosetting. Liner mounted. Natural.	2.4 (0.061)	6.5 (0.165)	32 (3.5)	35	17 (30)	500	130

POLYIMIDE FILMS



For outstanding thermal resistance and excellent dielectric strength, choose IPG tapes with polyimide backing. They're tough, puncture resistant and flame retardant–ideal for high temperature insulation and processing environments.

ACRYLIC

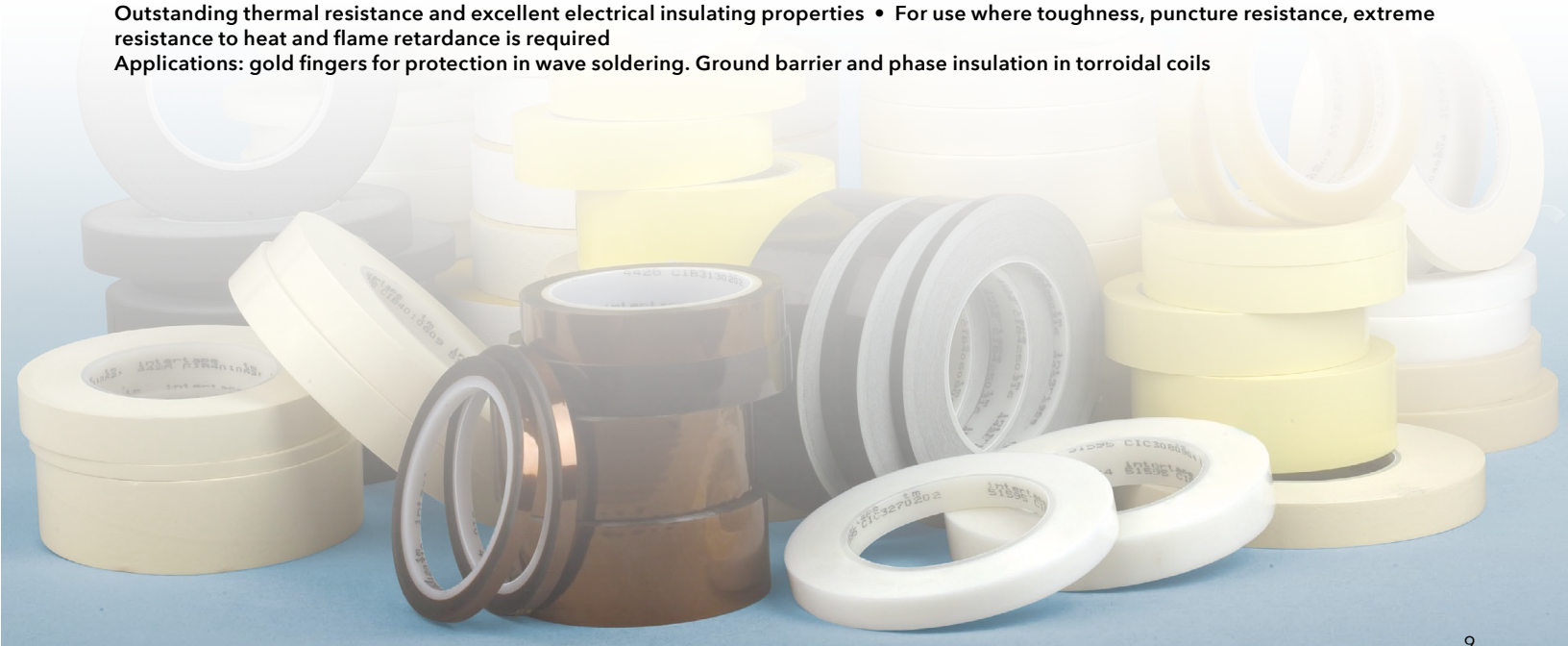
STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
51579	Tough, excellent insulating properties. Puncture resistant. Amber.	1.0 (0.025)	2.2 (0.056)	30 (3.3)	30 (53)	7,000	155

Excellent chemical and thermal resistance
Applications: bundling and inter-layer insulation in high temperature transformers and large DC mining and traction motors

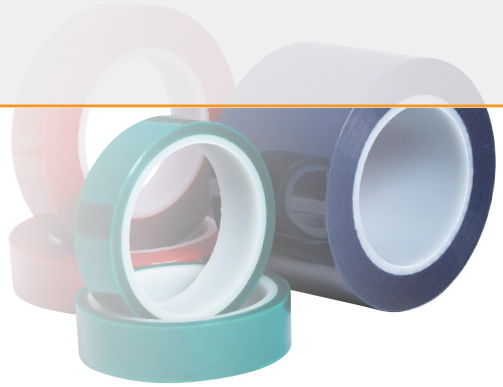
SILICONE THERMOSETTING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	DIELECTRIC STRENGTH	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	Total Volts	°C
4118	Kapton® polyimide backing. Outer wrap on small bobbin wound coils and on form wound coils for traction motors. Film meets MIL-P-46112B / ASTM D5213, Type I. Amber. Meets UL-510.	1.0 (0.025)	2.6 (0.067)	25 (2.7)	30 (53)	7,000	180
4428	Outer wrap on small bobbin wound coils and on form wound coils for traction motors. Amber. Meets UL-510.	1.0 (0.025)	2.5 (0.064)	25 (2.7)	30 (53)	7,000	180
4429	Extra strength. Outer wrap on small bobbin wound coils and on form wound coils for traction motors. Amber. Meets UL-510.	2.0 (0.050)	3.5 (0.09)	30 (3.3)	65 (114)	11,000	180

Outstanding thermal resistance and excellent electrical insulating properties • For use where toughness, puncture resistance, extreme resistance to heat and flame retardance is required
Applications: gold fingers for protection in wave soldering. Ground barrier and phase insulation in torroidal coils



SPECIALTY NON-UL



Each product is specifically designed for a variety of high temperature applications. Unique applications include splicing rough surface materials and masking off sensitive areas to protect during plasma/thermal spray operations.

PCB MASKING

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	ELONGATION	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	%	°C
FM28	Polyimide backed with Silicone adhesive. Heat resistant, Excellent choice for high temperature processing applications in printed circuit board fabrication. Amber.	1.0 (0.025)	2.5 (0.064)	25 (2.7)	30 (52)	80	204

ANTI-STATIC TAPE

STYLE	DESCRIPTION	BACKING THICKNESS	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	ELONGATION	TEMP RATING
		mil (mm)	mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	%	°C
FM-38	Polyimide backed silicone adhesive with anti-static polymer coating. Generates less than 50 volts discharge as it is being dispensed. For wave solder and reflow applications. Amber.	1.0 (0.025)	2.0 (0.05)	17.5 (1.9)	>19 (33)	>50	280

SPLICING & HARNESSING

STYLE	DESCRIPTION	COLOR	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	ELONGATION	TEMP RATING
			mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	%	°C
LA26	4.0 mil Polyester/rope fiber laminate. Thermosetting natural rubber adhesive. Offers bulk and stiffness; hand tears for tabbing, holding and wrapping.	Natural, Black	6.0 (0.15)	60 (6.6)	45 (79)	2	176

HIGH TEMPERATURE MASKING

STYLE	DESCRIPTION	COLOR	TOTAL THICKNESS	ADHESION TO STEEL	ELONGATION	TEMP RATING
			mil (mm)	oz/in (N/cm)	%	°C
6215	2.0 mil PET, silicone adhesive, high temperature masking.	Green	3.2 (0.081)	35 (3.8)	100	218
6120	1.0 mil PET, silicone adhesive, high temperature masking.	Blue	3.0 (0.076)	49 (5.4)	100	218
6130	1.0 mil PET, silicone adhesive, high temperature splicing.	Red	2.7 (0.069)	45 (4.9)	100	204
PG21	Extremely versatile, warm or cold removal. Exposure to oven temperatures up to 325°F (163°C) for 30 minutes (time and temperature determined by surface). SAE-AMS-T-21595.	Beige	7.3 (0.185)	28 (3.1)	10	163*

* 30 minutes (time and temperature determined by surface).

GLASS CLOTH - NON-UL

STYLE	DESCRIPTION	COLOR	TOTAL THICKNESS	ADHESION TO STEEL	TENSILE STRENGTH	ELONGATION	TEMP RATING
			mil (mm)	oz/in (N/cm)	lbs/in (N/cm)	%	°C
RG46	5.0 mil Thermosetting rubber adhesive; resistant to strong solvents; high flexibility, conformability, heat resistance and tensile strength; ideal for splicing applications where surface materials are rough (roofing materials, textiles, etc.) MIL-T-4053B.	White, Black	7.0 (0.178)	50 (5.5)	175 (306)	3	204
RG47	5.0 mil Acrylic adhesive; resistant to solvents and oils; high flexibility, conformability, heat resistance and tensile strength; ideal for splicing applications where surface materials are rough (roofing materials, textiles, etc.)	White	7.0 (0.178)	40 (4.4)	200 (350)	3	155
RG48	5.0 mil Thermosetting silicone adhesive; masks sensitive areas to protect from plasma spray; high flexibility, conformability, heat resistance and tensile strength; ideal for splicing applications where surface materials are rough (roofing materials, textiles, etc.) Meets UL-510.	White	7.0 (0.178)	45 (4.9)	185 (324)	3	260

UL LISTINGS

Tape numbers in bold represent an example of tapes required for Sealed Tube Testing in order to qualify total product line. Matrix reviewed and approved by Andre D. Miron, Principal Engineer – Electrical Insulation Systems and Materials, UL LLC, on February 3, 2012.

ADHESIVE	SUBSTRATE	PET	PET/ FILAMENT†	PET/ ROPE†	GLASS CLOTH1	GLASS CLOTH2	PET/ FLEECE†	FLEECE	ACETATE CLOTH	NOMEX	FEP	POLYIMIDE
I	Acrylic	51589-00 51589-04	51597*-00 51597-00 4238-00		4617-00		51595-00 51595-04	**4564-00**				51579-00
II	Thermosetting Acrylic	54113-00 54113-17 54143-00	4237-00								**4500-00**	
III	Thermosetting Acrylic									**56228-00**		
IV	Thermosetting Rubber	**51588-00** 51587-04 51587-17 51594-17										
V	Thermosetting Rubber						51580-00 **51596-00**					
VI	Thermosetting Silicone					**4618-00**						
VII	Thermosetting Rubber		**51599** **PV1-00** 51599-00	4426-00 4426-04 4427-00 **51578-00**			51245-00		4560-00			
VIII	Thermosetting Rubber											
IX	Thermosetting Rubber	**54108-08**										
X	Thermosetting Rubber				**4616-00**							
XI	Thermosetting Rubber				**4616-04**		51580-04 51596-04					
XII	Thermosetting Silicone											**4118-00** 4428-00 4429-00

All products are ROHS Compliant unless otherwise noted.

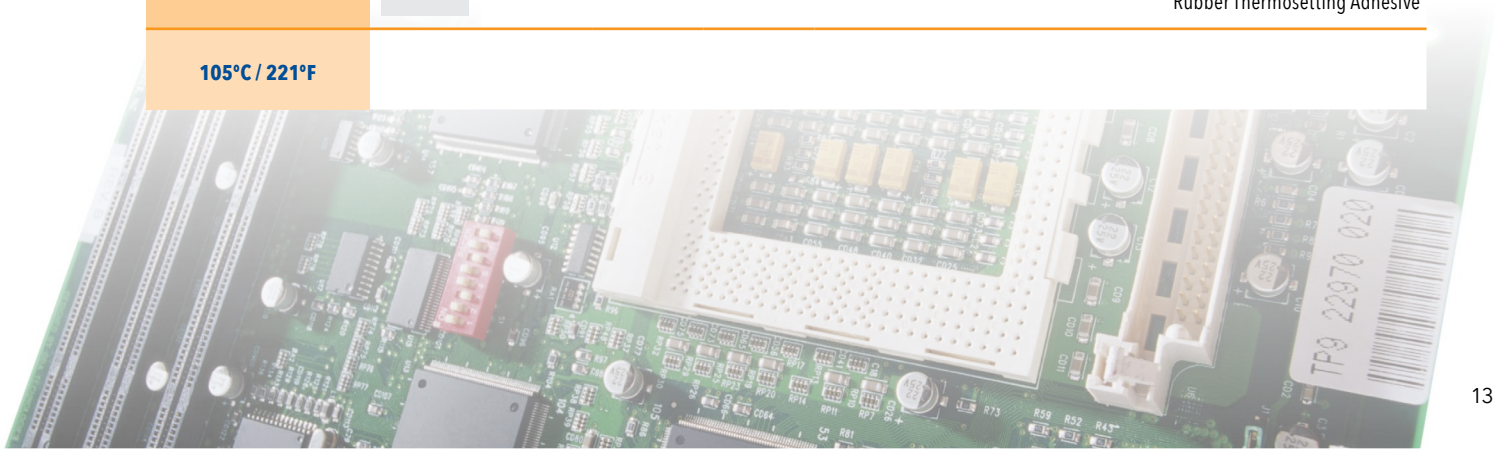
KEY

PET: Polyethylene Terephthalate Film
Fleece: Non-Woven Polyethylene Terephthalate
†: Laminate

Color Codes:
00 Clear/Natural
04 Black
08 White
17 Yellow

UL APPROVED TEMPERATURE RANGE

200°C / 392°F	4618				**Glass Cloth** Silicone Adhesive
180°C / 356°F	4118				**Dupont Kapton®** Silicone Adhesive
	4428	4429			**Polyimide Film** Silicone Adhesive
155°C / 311°F	4617				**Glass Cloth** Acrylic Adhesive
	4616				**Glass Cloth** Rubber Thermosetting Adhesive
	51579				**Polyimide Film** Acrylic Adhesive
	56228				**Dupont Nomex®** Acrylic Adhesive
	4237	4238	51597		**Polyester Filament** Acrylic Adhesive
	51595				**Polyester / Non Woven** Acrylic Adhesive
130°C / 266°F	51589	54113	54113	54143	**Polyester Film** Acrylic Adhesive
	51587	51588	51594	54108	**Polyester Film** Rubber Thermosetting Adhesive
	4426	4427	51578		**Polyester / Paper** Rubber Thermosetting Adhesive
	51596	51245	51580		**Polyester / Non Woven** Rubber Thermosetting Adhesive
	51599PV1				**Polyester Filament** Rubber Thermosetting Adhesive
	4564				**PET Fleece** Acrylic Adhesive
	4560				**Acetate Cloth** Rubber Thermosetting Adhesive
105°C / 221°F					



INSULATING TAPES



The IPG facilities which manufacture the insulating tapes in this publication have been registered by Underwriters Laboratories, Inc. to the International Standards Organization (ISO) 9002 quality management system standard. For the customer, registration provides proof of the quality of suppliers' systems. For organizations with multiple manufacturing sites, such as IPG, ISO registration provides a consistent and efficient method of standardization. Prior to actual use, the product data sheet and/or Material Safety Data Sheet should be reviewed.

ADHESIVE SYSTEMS

ACRYLIC

Acrylic adhesives perform in continuous operating temperatures from -40°F to +375°F (-40°C to +188°C). Benefits include exceptional solvent resistance, excellent adhesion to metal and superior weathering and aging characteristics. Acrylics have excellent shelf life, and their abiilty to wet-out improves when exposed to elevated temperatures, thus increasing both adhesion and tack properties.

NATURAL RUBBER

Natural rubber adhesives impart high tack and shear characteristics. These adhesives perform in continuous operating temperatures from -20°F to +325°F (-29°C to +164°C). Natural rubber adhesives can be specially blended to provide a broad range of adhesion performance, from a low adhesion of 3.0 oz/in to a high adhesion of 60.0 oz/in.

THERMOSETTING ORGANIC RUBBER

Thermoset adhesives set up on first exposure to heat, and remain set regardless of subsequesnt temperature cycles. A blend of organic rubbers compounded with filler, tackifiers or curing agents, these adhesives have three primary benefits:

- Increased adhesion strength
- Improved solvent resistance
- Improved thermal capability

RECOMMENDED THERMOSETTING TIME & TEMPERATURES FOR ADHESIVE SYSTEMS (for maximum solvent resistance)

Time	Rubber-Resin	Acrylic	Silicone
1 hour	150°C (300°F)	150°C (300°F)	-
2 hours	135°C (275°F)	135°C (275°F)	-
3 hours	120°C (250°F)	120°C (250°F)	260°C (500°F)
24 hours	-	-	260°C (500°F)

SILICONE

Perfect for extreme temperature applications. Silicone adhesives perform in continuous operating temperatures from -100°F to +500°F (-73°C to 260°C). They exhibit good chemical resistance, retain electrical properties and remove cleanly with little to no residue.

Product Shelf Life

All IPG Electrical/Electronic tapes have a 2-year shelf life following the date of shipment. It is IPG's standard procedure to ship any product with at least 6 months of its shelf life remaining. Any special request for shelf life requirements may require a larger-than-stated minimum order quantity (MOQ) that justifies a non-scheduled product run. Contact your IPG sales representative for specific shelf life MOQ requirements. No product returns will be accepted on special shelf life request orders.

THERMAL CLASS BY SUBSTRATE*

SPECIFICATION	PRODUCT	TYPE
For use at temperatures not to exceed 130°C (Class B)	51587, 51588, 51589, 51594, 54108, 54113, 54143	Polyester Film
	4426-00, 4426-04, 4427-00, 51578, 51580-00, 51596-00, 51596-04, 51245-00	Composite Film
	51599PV1	Glass Filament
	4560-00, 4560-04	Acetate Cloth
	4564	PET Fleece
For use at temperatures not to exceed 155°C (Class F)	51595-00, 51595-04	Composite Film
	4237, 4238, 51597	Glass Filament
	4616-00, 4616-04, 4617-00	Glass Cloth
	56228	Nomex® Paper
	51579	Polyimide Film
For use at temperatures not to exceed 180°C (Class H)	4118, 4428, 4429	Polyimide Film
For use at temperatures not to exceed 200°C (Class N)	4618	Glass Cloth

Nomex® is a registered trademark of EI Dupont de Nemours

*UL Recognized Components in UL File E20780, Product Category OANZ2

CASE PACK FOR SLIT WIDTHS

WIDTH	CASE QUANTITY	WIDTH	CASE QUANTITY
.250in (6.35mm)	144	1.00in (25.40mm)	36
0.311in (7.90mm)	120	1.125in (28.57mm)	32
.375in (9.52mm)	96	1.25in (31.75mm)	28
0.437in (11.09mm)	84	1.50in (38.10mm)	24
.04531in (11.51mm)	80	1.625in (41.27mm)	20
.500in (12.70mm)	72	1.75in (44.45mm)	20
0.562in (14.27mm)	68	2.00in (50.80mm)	24
.625in (15.87mm)	60	2.187in (55.55mm)	16
.6299in (15.99mm)	56	2.25in (57.15mm)	16
0.687in (17.45mm)	52	2.50in (63.50mm)	12
.750in (19.05mm)	48	2.82in (71.63mm)	12
.875in (22.23mm)	40	3.00in (76.20mm)	12
0.937in (23.80mm)	36		

LENGTHS FOR IPG TAPES*

LENGTH	PRODUCT
36 yds	4118, 4428, 4429, 4618, 51579, FM28, FM38
55 yds	4560-00, 4560-04, 4564-00, 51337, PG21
60yds	4237, 4238, 4426-00, 4426-04, 4427-00, 4616-00, 4616-04, 4617-00, 51578, 51597, 51599PV1, 56228
72 yds	6120, 6130, 6215, 51587, 51588, 51589, 51594, 51595-00, 51595-04, 54108, 54113, 54143
90 yds	51245-00, 51596-00, 51596-04, 51580-00

*Other tape lengths may be available. Contact your IPG sales representative or Customer Service for more information.

MILITARY

SPECIFICATION	PREVIOUSLY KNOWN AS	PRODUCT	TYPE
A-A-59770A, Type MFT-2.5	MIL-15126F	51594, 51587, 51588	Polyester Film
MIL-I-19166C		4618	Glass Cloth
MIL-P-46112 B / ASTM D5231, Type I		4118	Silicone Thermosetting
CID AA-59770-4, Type GFT		4617	Glass Cloth
L-T-100B, Type I		51589	Polyester
MIL-I-15126F, Type MF-2.5		51587,51588	Film
MIL-I-15126F, Type GFT		4617	Glass Cloth
MIL-T-4053 B		4616, RG46	Glass Cloth
Northrup-Grumman C117301		4617	Glass Cloth
UL-510		602, 4618, 4428, 4429, 56228	

This publication is a comparitive guide for tape selection purposes. All property values shown are typical and are not intended for specification purposes. They are based on tests performed in accordance with ASTM D 1000. Proposed specifications detailing maximum and minmum values are also available upon request.

i tape



CORPORATE PROFILE

Headquartered in Sarasota, Florida, IPG is a global provider of packaging and protective solutions across a diversified set of geographies and end-markets. The Company develops, manufactures, and sells a variety of solutions including paper and film-based pressure-sensitive and water-activated tapes, stretch and shrink films, protective packaging, woven and non-woven products and packaging machinery.

USA

1. Ansonia, CT
2. Atlanta, GA
3. Bardstown, KY (2)
5. Blythewood, SC
6. Brighton, CO
7. Carbondale, IL
8. Carlstadt, NJ
9. Carrollton, TX
10. Chicago, IL
11. Corona, CA
12. Danville, VA
13. Everetts, NC
14. Marysville, MI
15. Menasha, WI
16. Midland, NC
17. Sarasota, FL
18. Schaumburg, IL
19. Springfield, OH
20. Tremonton, UT

CANADA

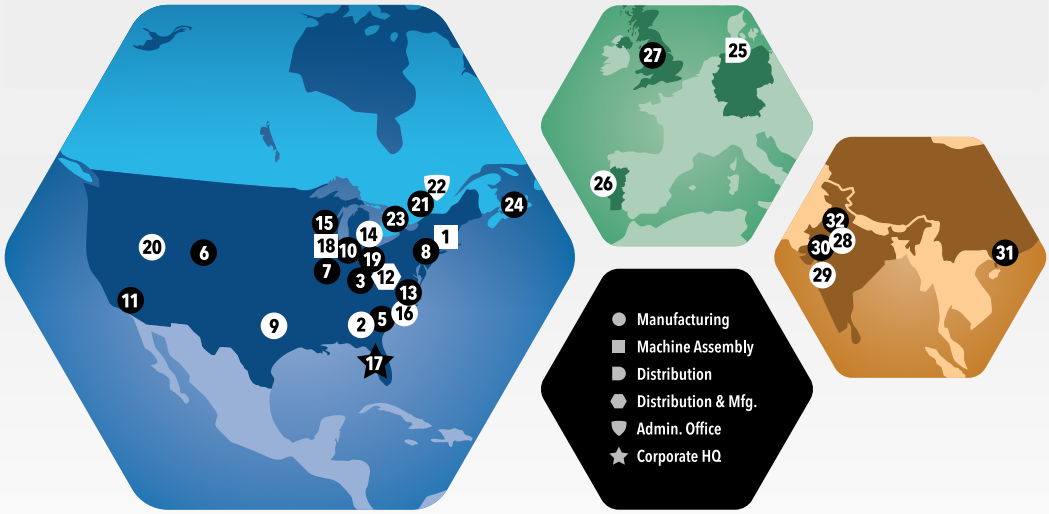
21. Cornwall, ON
22. Montreal, QC
23. Toronto, ON
24. Truro, NS

EU/UK

25. Flensburg, Germany
26. Porto, Portugal
27. Widnes, UK

ASIA

28. Chopanki, India
29. Daman, India
30. Dahej, India
31. Jiangmen City, China
32. Karoli, India



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