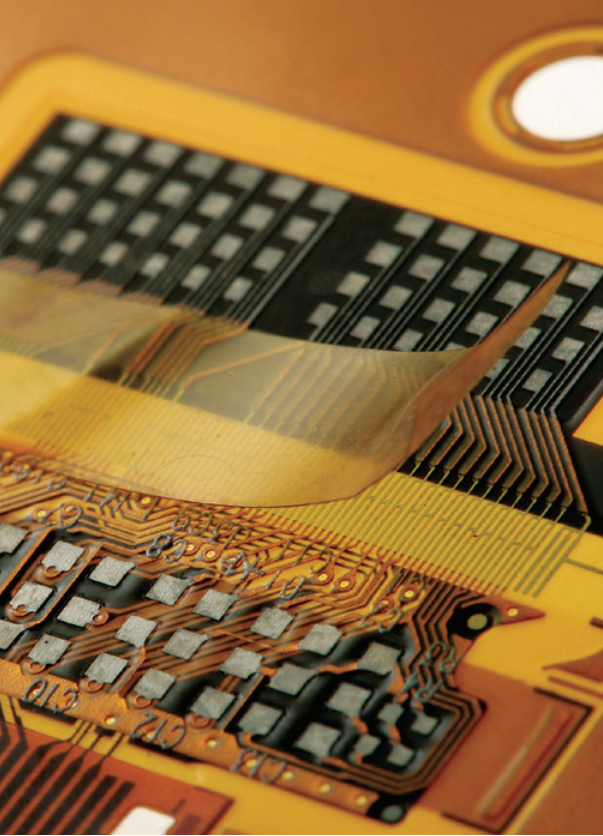




# ELECTRICAL AND ELECTRONIC TAPES





# Electrical and Electronic Tapes

*Intertape™ brand 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).*

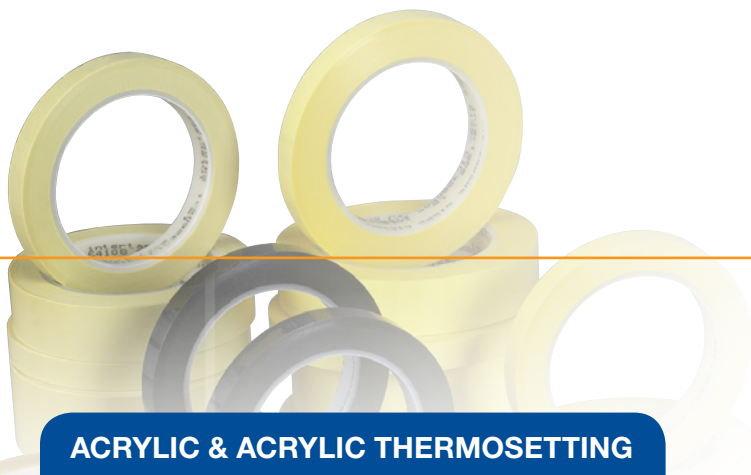
*With the most comprehensive product line in the industry, IPG® has the ideal solution to your most demanding applications.*



*Get more info about Electrical/Electronic Tapes!*

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# Polyester Films

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

## ACRYLIC & ACRYLIC THERMOSETTING

Resource Number	Description	Polyester Backing mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °C
51589	Solvent resistant. Excellent long-term aging characteristics. Non Thermosetting. Clear, Yellow. 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, Yellow.	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

Resource Number	Description	Polyester Backing mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °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

Resource Number	Description	Polyester Backing mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °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

- Elongation 100%
- Tough and conformable
- Abrasion and moisture resistant

# 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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C	<ul style="list-style-type: none"> <li>• Multi-purpose tape</li> <li>• Tear and puncture resistant</li> <li>• High tensile strength</li> <li>• Excellent dielectric strength</li> </ul>
51595	Coil and transformer wrapping, anchoring, harnessing and outer-wrap for coils. Black, Natural.	3.5 (0.089) Polyester Non-woven	4.5 (0.114)	50 (5.5)	30 (53)	30%	5,000	155	

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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C	<ul style="list-style-type: none"> <li>• Excellent solvent resistance</li> </ul>
4426	Low cost, all-purpose electrical tape. Black, Natural.	4.0 (0.101) Polyester Rope Fiber	6.0 (0.150)	60 (6.6)	45 (79)	2%	5,500	130	
4427	Economical and versatile. Natural.	3.5 (0.089) Polyester Rope Fiber	5.5 (0.140)	60 (6.6)	40 (70)	2%	4,500	130	
51578	Excellent solvent resistance. Natural.	3.5 (0.089) Polyester Rope Fiber	5.5 (0.140)	70 (7.7)	40 (70)	2%	4,500	130	
51596	Tear and puncture resistant. High tensile strength. Excellent dielectric strength. Black, Tan.	3.5 (0.089) Polyester Non-woven	4.5 (0.114)	60 (6.6)	31.5 (55)	30%	4,500	130	
51580	Coil and transformer wrapping, anchoring, harnessing and outer-wrap for coils. Natural.	4.0 (0.101) Polyester Non-woven	5.0 (0.127)	50 (5.5)	45 (79)	25%	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 Non-woven	5.3 (0.134)	85 (9.3)	31.5 (55)	50%	5,000	130	

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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °C
4237	Lead and saddle tie down, bundling motor and transformer coils and coil covering applications. Designed for oil-filled applications. Thermosetting acrylic. Transparent.	4.5 (0.114)	7.25 (0.18)	45 (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 (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 (4.4)	250 (438)	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

Resource Number	Description	Polyester Glass mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °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.

## ACRYLIC

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °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)	200 (350)	3%	3,000	155
54562	Uniform unwind. White.	5.0 (0.127)	9.0 (0.229)	45 (4.9)	195 (341)	5%	3,000	155

Applications: Inter-layer insulation, coil outer wraps, tie-downs, lead insulation and protection. Electrical motor and generator binding.

- 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.

## RUBBER THERMOSETTING

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °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)	175 (306)	3%	2,500	155

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

## SILICONE THERMOSETTING

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °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)	185 (324)	3%	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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C
4560	High adhesion. Will accept varnish impregnation. Black, White.	6.0 (0.152)	7.0 (0.178)	50 (5.5)	40 (70)	15%	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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C
51337	Flatback paper backing with acrylic adhesive. Excellent solvent resistance. pH neutral. For holding and bundling applications; outer wrap for coils. Non Thermosetting. Natural.	6.25 (0.159)	8.5 (0.216)	80 (8.7)	54 (95)	3%	1,900	105
56228FR	2.0 mil Nomex® backing. Flame retardant. Thermosetting acrylic. Off-white. Meets UL-510.	2.0 (0.050)	3.5 (0.089)	40 (4.4)	25 (44)	8%	2,500	155

Nomex® is a registered trademark of El Dupont de Nemours

## ACRYLIC ZONE-COATED

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C
4564	2.4 mil polyester fleece backing. Non Thermosetting. Liner mounted. Natural.	2.4 (0.061)	6.5 (0.165)	32 (3.5)	17 (30)	35%	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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °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 D5231, 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 toroidal coils

# Paper Electronic

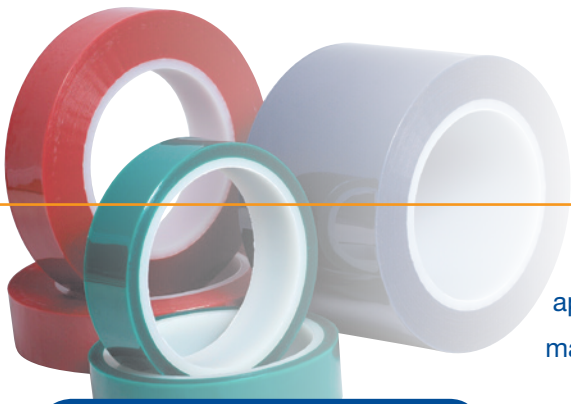
IPG® Paper Electronic Tapes are designed to meet a variety of applications, including in-process and packaging needs of “through-hole” electronic component manufacturers. They're available in a variety of strengths and paper backings. These high performance products are specially designed to perform in the most unique and demanding applications where adhesion, tensile strength, moisture, tear, and burst-through resistance are required.

## SILICONE THERMOSETTING

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Dielectric Strength Total Volts	Temp Rating °C
BD-1	High strength. High tensile strength with good edge tear resistance. Excellent stain resistance. Recommended for sequential taping and tape reeling. White, Blue.	Rope Flatback Paper	8.8 (0.223)	61 (6.7)	36 (63)	4%	180
BD-24	Medium strength. Recommended for bandoliering, tape reeling and sequencing electronic components. Blue, Light Cream.	Medium Kraft Paper	6.1 (0.155)	38 (4.2)	25 (44)	7%	180

- Pressure sensitive tape with excellent mass to mass adhesion.





# 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

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Temp Rating °C
<b>FM-28</b>	1.0 Polyimide backed silicone adhesive.	1.0 (0.025)	2.5 (0.064)	25 (2.7)	30 (52)	80%	204

- Heat resistant
- Excellent choice for high temperature processing applications in printed circuit board fabrication

## ANTI-STATIC TAPE

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Temp Rating °C
<b>FM-38</b>	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
<b>FM-48</b>	Polyimide backing combined with conductive polymer coating and semi-conducting silicone adhesive. Low voltage discharge in dispensing and removal. Meets ANSI S-2020 standards. For wave solder and reflow applications. Amber.	1.0 (0.025)	2.0 (0.05)	21 (2.3)	>7.7 (13.5)	>50%	250
<b>FM-58</b>	1.0 PET film backing combined with conductive acrylic polymer for low voltage discharge while dispensing. Remains clear; non-yellowing. For packaging applications where anti-static or low static is required. Clear.	1.0 (0.025)	2.0 (0.05)	20 (2.2)	>28 (49)	>70%	120

## SPLICING & HARNESSING

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Temp Rating °C
<b>LA-26</b>	Polyester/rope fiber laminate. Thermosetting natural rubber adhesive. Offers bulk and stiffness; hand tears for tabbing, holding and wrapping. Natural.	4.0 (0.102)	6.0 (0.15)	60 (6.6)	45 (79)	2%	176

# Specialty Non-UL



## HIGH TEMPERATURE MASKING

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Elongation %	Dielectric Strength Total Volts	Temp Rating °C
6215	2.0 PET, silicone adhesive, high temperature masking. Green.	2.0 (0.050)	3.2 (0.081)	35 (3.8)	100%	218	
6120	1.0 PET, silicone adhesive, high temperature masking. Blue.	1.0 (0.025)	3.0 (0.076)	49 (5.4)	100%	218	
6130	1.0 PET, silicone adhesive, high temperature splicing. Red.	1.0 (0.025)	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.	Fine Crepe	7.3 (0.185)	28 (3.1)	10%	163	

- Designed for high temperature “powder coat” masking and PCB protection during various production phases
- Also suitable for splicing

## GLASS CLOTH - NON-UL

Resource Number	Description	Backing Thickness mils (mm)	Total Thickness mils (mm)	Adhesion to Steel oz/in (N/cm)	Tensile Strength lbs/in (N/cm)	Elongation %	Temp Rating °C
RG46	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.	5.0 (0.127)	7.0 (0.178)	50 (5.5)	175 (306)	3%	204
RG47	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.	5.0 (0.127)	7.0 (0.178)	40 (4.4)	200 (350)	3%	155
RG48	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.) White. Meets UL-510.	5.0 (0.127)	7.0 (0.178)	45 (4.9)	185 (324)	3%	260
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.	Fine Crepe	7.3 (0.185)	28 (3.1)	26 (46)	10%	163

# 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	Glass Cloth3	PET/ Fleece†	Fleece	Acetate Cloth	PET/ Nomex†	Nomex	FEP	Poly- imide
I	Acrylic	51589-00 51589-04 51589-17	51597*-00 51597-00 4238-00		4617-00			51593-00 51595-00 51595-04	<b>4564-00</b>					51579-00
II	Thermosetting Acrylic	54113-00 54113-17 54143-00 54143-17 51592-00 51592-08 51592-17	4237-00								<b>54356-00</b>		<b>4500-00</b>	
III	Flame Retardant Thermosetting Acrylic	51560-08 51560-17 51562-08 51562-17										<b>56228 FR-00</b>		
IV	Thermosetting Rubber	<b>51588-00</b> 51587-04 51587-17 51594-17												
V	Thermosetting Rubber							51580-00 <b>51596-00</b>						
VI	Thermosetting Silicone					<b>4618-00</b>	4619-00							
VII	Thermosetting Rubber		<b>51599 PV1-00</b> 51599-00	4426-00 4426-04 4427-00 <b>51578-00</b>				51245-00		4560-00 4560-04				
VIII	Thermosetting Rubber	<b>54107-17</b>												
IX	Thermosetting Rubber	<b>54108-08</b>												
X	Thermosetting Rubber				<b>4616*-00</b>									
XI	Thermosetting Rubber				<b>4616-04</b>			51580-04 51596-04						
XII	Flame Retardant Thermosetting Rubber				461 FR-04					4570-00 <b>4570-04</b>				
XIII	Thermosetting Silicone													<b>4118-00</b> 4428-00 4429-00

## Key

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

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

All products are ROHS Compliant unless otherwise noted.

# 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 ability 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 or harden on first exposure to heat, and remain set regardless of subsequent 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

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)
(for maximum solvent resistance)			

### 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 manufacture. 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.



# Insulating Tapes

## THERMAL CLASS BY SUBSTRATE\*

Specification	Product	Type
For use at temperatures not to exceed 130°C (Class B)	51587, 51588, 51589, 51592, 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, 54562	Glass Cloth
	56228FR	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 El 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, FM29, FM38, FM48
55 yds	4560-00, 4560-04, 4564-00, 51337, PG21, FM58
60yds	4237, 4238, 4426-00, 4426-04, 4427-00, 4616-00, 4616-04, 4617-00, 51578, 51597, 51599PV1, 54562, 56228FR
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

## 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-46112B / ASTM D5231, Type I		4118	Silicone Thermosetting

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

This publication is a comparative 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 minimum values are also available upon request.



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### CORPORATE PROFILE

**Intertape Polymer Group® Inc. (IPG®)** is an acknowledged leader in the packaging industry. Leveraging its advanced manufacturing and technologies, extensive research and development capabilities and a comprehensive strategic acquisition program, the company believes it has assembled the broadest and deepest range of products in the industry. IPG® is widely recognized for its development and manufacture of specialized polyolefin, plastic and paper-based packaging products, as well as complementary packaging systems for industrial and retail use. Additionally, IPG® is a woven and flexible intermediate bulk container (FIBC) manufacturer. Its performance products, including tapes and cloths, are designed for demanding marine and composites, automotive and industrial applications and are sold to a broad range of industry/specialty distributors, retail stores and large end-users in diverse industries.



- 1. Ansonia, CT ●▲
- 2. Blythewood, SC ●
- 3. Brighton, CO ●
- 4. Carbondale, IL ●
- 5. Danville, VA ●▲
- 6. Delta, British Columbia ●▲
- 7. Flensburg, Germany ▲
- 8. Marysville, MI ●
- 9. Menasha, WI ●
- 10. Ontario, CA ▲
- 11. Porto, Portugal ●
- 12. Tampa, FL ●▲
- 13. Tremonton, UT ●
- 14. Truro, Nova Scotia ●
- 15. **Executive Headquarters**  
Sarasota, FL
- 16. **Corporate Headquarters**  
Montreal, Quebec

● Manufacturing  
▲ Distribution

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