



Adhesive Tapes for Electrical Insulation

For Transformers, Spools, Electric Motors, Printed Circuit Boards, and more.



| Product | Backing | Adhesive Type | Backing Thickness (mm) | Total Thickness (mm) | Colour(s) | Adhesion to Steel (N/25mm) | Tensile Strength (N/25mm) | Elongation at break (%) | Breakdown Voltage (V _{eff} VDE 0303) | Insulation Resistance (megaΩ) | Electrolytic Corrosion | Flammability | RoHS | UL-Specification | UL-File-No. |
|---|--------------------------------------|---------------|------------------------|----------------------|-------------------------|----------------------------|---------------------------|-------------------------|--|-------------------------------|------------------------|--------------|---|---|-------------|
| Insulation Class B 130°C | | | | | | | | | | | | | | | |
| Polyester Film | | | | | | | | | | | | | | | |
|  51587 | Polyester Film | RT | 0,025 | 0,056 | Black Yellow | 13,75 | 110,00 | 100 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  51588 | Polyester Film | RT | 0,025 | 0,056 | Clear | 13,70 | 110,00 | 100 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  51594 | Polyester Film | RT | 0,025 | 0,051 | Yellow | 12,30 | 110,00 | 100 | 5000 | 10 ⁵ | A1,0 | BU1 |  |  | E20780 |
|  54108 | Polyester Film | RT | 0,025 | 0,060 | Beige | 13,70 | 110,00 | 100 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  50501 (1) | Polyester Film | A | 0,025 | 0,055 | 9 Colours* | 11,00 | 100,00 | 80 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E338128 |
|  51589 | Polyester Film | A | 0,025 | 0,056 | Yellow Clear | 9,60 | 110,00 | 100 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  54113 | Polyester Film | AT | 0,025 | 0,060 | Yellow Clear | 12,30 | 110,00 | 100 | 5000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  54143 | Polyester Film | AT | 0,035 | 0,076 | Yellow Clear | 13,70 | 166,00 | 100 | 7500 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  11350-1 | Polyester Film | AT | 0,025 | 0,060 | Yellow Clear | 10,00 | 110,00 | 100 | 5000 | 10 ¹⁵ | A1,0 | BU1 |  |  | E338128 |
|  11350-2 | Polyester Film | AT | 0,050 | 0,085 | 7 Colours** | 7,80 | 216,00 | 100 | 6500 | 10 ¹⁵ | A1,0 | BU1 |  | - | - |
|  11350-1-DS | Polyester Film (double-sided) | AT | 0,025 | 0,090 | Yellow | 9,80 | 108,00 | 100 | 5000 | 10 ¹⁵ | A1,0 | BU1 |  | - | - |
|  11587-2 | Polyesterfolie | RT | 0,050 | 0,087 | Yellow, Black, Clear | 15,00 | 175,00 | 100 | 7000 | +160°C ⁽⁴⁾ | | |  | - | - |
| Silk Acetate Cloth Tapes | | | | | | | | | | | | | | | |
|  4560 | Silk Acetate Cloth | RT | 0,152 | 0,178 | White Black | 15,00 | 175,00 | 15 | 2000 | 10 ⁴ | A1,0 | BU1 |  |  | E20780 |
|  5060 PV3 | Silk Acetate Cloth | AT | 0,180 | 0,240 | Black | 11,80 | 157,00 | 16 | 2500 | +130°C ⁽⁴⁾ | | |  |  | E338128 |
|  5060 PV4 | Silk Acetate Cloth(oil-resistant) | AT | 0,190 | 0,240 | White | 7,40 | 137,00 | 19,5 | 3000 | +130°C ⁽⁴⁾ | | |  | - | - |
| Specialty | | | | | | | | | | | | | | | |
|  4138 | Polypropylen | A | 0,025 | 0,065 | Clear | 28,00 | 24,00 | 100 | 4000 | - | - | - |  | - | - |
|  4564 ⁽³⁾ | Polyester Fleece (zone coated) | AT | 0,061 | 0,165 | White | 8,90 | 76,00 | 35 | 500 / 4600 | 10 ⁶ | A1,2 | - |  |  | E20780 |
|  11600 PV3 ⁽¹⁾ | Polyester Cloth | AT | 0,125 | 0,180 | White Black | 11,80 | 314,00 | 12 | 2000 | +175°C ⁽⁴⁾ | | |  | - | - |

| Product | Backing | Adhesive Type | Backing Thickness (mm) | Total Thickness (mm) | Colour(s) | Adhesion to Steel (N/25mm) | Tensile Strength (N/25mm) | Elongation at Break (%) | Breakdown Voltage (V _{eff} VDE 0303) | Insulation Resistance (megaΩ) | Electrolytic Corrosion | Flammability | RoHS | UL-Specification | UL-File-No. |
|--|-------------------------------|---------------|------------------------|----------------------|--------------|----------------------------|---------------------------|-------------------------|--|-------------------------------|------------------------|--------------|---|---|-------------|
| Polyester Laminates | | | | | | | | | | | | | | | |
|  4426 | Polyester Film / Paper-Fleece | RT | 0,102 | 0,152 | White Black | 16,47 | 200,00 | 2 | 5500 | 10 ⁴ | A1,0 | BU3 |  |  | E20780 |
|  4427 | Polyester Film / Paper-Fleece | RT | 0,089 | 0,140 | White | 16,50 | 175,00 | 2 | 4500 | 10 ⁴ | A1,0 | BU3 |  |  | E20780 |
|  51578 | Polyester Film / Paper-Fleece | RT | 0,089 | 0,140 | White | 19,00 | 175,00 | 2 | 4500 | 10 ⁴ | A1,0 | BU3 |  |  | E20780 |
|  54354 | Polyester Film / Paper | RT | 0,160 | 0,220 | Beige | 16,25 | 175,00 | 20 | 8000 | 5*10 ⁶ | B3,0 | BU2 |  | - | - |
|  51596 | PET-Film / PET-Fleece | RT | 0,089 | 0,114 | White Black | 16,50 | 138,00 | 30 | 4500 | 10 ⁵ | A1,0 | BU2 |  |  | E20780 |
|  51245 | PET-Film / PET-Fleece | RT | 0,089 | 0,134 | White | 23,25 | 136,00 | 50 | 5000 | 10 ⁵ | A1,0 | BU2 |  |  | E20780 |
| Polyester Reinforced with Glass Filament | | | | | | | | | | | | | | | |
|  51599 PV1 | PET/Filament | RT | 0,127 | 0,178 | Beige | 15,00 | 1500,00 | 5 | 5000 | 10 ⁵ | A1,0 | BU2 |  |  | E20780 |
| Insulation Class F 155°C | | | | | | | | | | | | | | | |
| Polyester Laminates | | | | | | | | | | | | | | | |
|  51595 | PET-Film / PET-Fleece | AT | 0,089 | 0,114 | White, Black | 13,70 | 131,00 | 30 | 4500 | 10 ⁵ | A1,0 | BU2 |  |  | E20780 |
|  11044-04-PV3 | PET-Film / PET-Fleece | AT | 0,060 | 0,110 | Black | 14,70 | 147,00 | 64 | 5700 | - | - | - |  |  | E338128 |
|  11044-08-PV3 | PET-Film / PET-Fleece | AT | 0,170 | 0,230 | White | 19,60 | 205,80 | 100 | 6000 | - | - | - |  |  | E338128 |
| Polyester Reinforced with Glass Filament | | | | | | | | | | | | | | | |
|  4237 | PET/Filament | AT | 0,114 | 0,180 | Clear | 12,25 | 1290,00 | 7 | 5000 | 10 ⁴ | A1,0 | BU2 |  |  | E20780 |
|  4238 | PET/Filament | AT | 0,165 | 0,190 | Clear | 12,00 | 1642,00 | 7,5 | 6000 | 10 ⁴ | A1,0 | BU2 |  |  | E20780 |
|  4238 PV3 | PET/Filament | A | 0,120 | 0,180 | Clear | 11,70 | 1176,00 | 14 | 6500 | +155°C ⁽⁴⁾ | - | - |  | - | - |
|  51597 | PET/Filament | AT | 0,140 | 0,165 | Clear | 11,00 | 1095,00 | 5 | 5000 | 10 ⁴ | A1,0 | BU2 |  |  | E20780 |
|  11597 | PET/Filament | A | 0,110 | 0,180 | Clear | 9,80 | 980,00 | 12 | 6500 | +155°C ⁽⁴⁾ | - | - |  |  | E338128 |
| Paper Reinforced with Glass Filament | | | | | | | | | | | | | | | |
|  2036 PV1 | Paper / Filament | AT | 0,200 | 0,230 | White | 11,70 | 931,00 | 8 | 4000 | +155°C ⁽⁴⁾ | - | - |  | - | - |

| Product | Backing | Adhesive Type | Backing Thickness (mm) | Total Thickness (mm) | Colour(s) | Adhesion to Steel (N/25mm) | Tensile Strength (N/25mm) | Elongation at Break (%) | Breakdown Voltage (V _{eff} VDE 0303) | Insulation Resistance (megaΩ) | Electrolytic Corrosion | Flammability | RoHS | UL-Specification | UL-File-No. |
|---|---|---------------|------------------------|----------------------|----------------|----------------------------|---------------------------|-------------------------|--|-------------------------------|------------------------|--------------|---|---|-------------|
| Glass Cloth | | | | | | | | | | | | | | | |
|  4616 | Glass Cloth | RT | 0,127 | 0,178 | White Black | 13,70 | 765,00 | 3 | 2500 | 10 ³ | A1,0 | BU2 |  |  | E20780 |
|  4617 | Glass Cloth | AT | 0,127 | 0,178 | White | 11,00 | 875,00 | 3 | 3000 | 10 ⁴ | A1,0 | BU2 |  |  | E20780 |
|  4627 | Glass Cloth | RT | 0,127 | 0,178 | White Black | 13,70 | 765,00 | 3 | 2500 | 10 ³ | A1,0 | BU2 |  | - | - |
|  6017 PV3 | Glass Cloth | AT | 0,140 | 0,190 | White | 11,10 | 637,00 | 15 | 3000 | - | - | - |  |  | E338128 |
|  6017 PV4 | Glass Cloth | AT | 0,145 | 0,180 | White Black | 13,20 | 588,00 | 7 | 2500 | +177°C ⁽⁴⁾ | - | - |  |  | E338128 |
|  6017 PV5 | Glass Cloth (printable / oil-resistant) | AT | 0,135 | 0,190 | White Black | 12,70 | 784,00 | 14 | 4000 | +177°C ⁽⁴⁾ | - | - |  |  | E338128 |
| Specialty | | | | | | | | | | | | | | | |
|  1401 AC | Teonex® | A | 0,050 | 0,085 | Blue | 11,25 | 225,00 | 60 | 8000 | +220°C ⁽⁴⁾ | - | - |  | - | - |
|  41356 PV2 | Nomex® / PET | AT | 0,050 0,025 | 0,130 | White | 11,80 | 118,00 | 10 | 6000 | +177°C ⁽⁴⁾ | - | - |  |  | E338128 |
|  41356 PV3 | Nomex® / PET | AT | 0,050 0,150 | 0,270 | White | 10,80 | 490,00 | 120 | >10000 | - | - | - |  |  | E338128 |
|  61228 PV3 | Nomex® | AT | 0,050 | 0,090 | White | 12,00 | 80,00 | 10 | 2000 | - | - | - |  |  | E338128 |
|  61228 PV4 | Nomex® | Si | 0,050 | 0,090 | White | 3,90 | 98,00 | 10 | 2500 | - | - | - |  | - | - |
| Polyimide Film / Kapton® / Apical® | | | | | | | | | | | | | | | |
|  51579 | Polyimide Film | AT | 0,025 | 0,056 | Amber | 8,20 | 132,50 | 60 | 7000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
| Insulation Class H 180°C | | | | | | | | | | | | | | | |
| Specialty | | | | | | | | | | | | | | | |
|  1401 | Teonex® | Si | 0,050 | 0,085 | Red | 6,25 | 225,00 | 60 | 8000 | +240°C ⁽⁴⁾ | - | - |  | - | - |
|  11202 PV3 | Teflon® | Si | 0,050 | 0,098 | Dark Brown | 8,80 | 118,00 | 120 | 10000 | - | - | - |  |  | E338128 |
| Polyimide Film / Kapton® / Apical® | | | | | | | | | | | | | | | |
|  4118 ⁽¹⁾ | Kapton® | SIT | 0,025 | 0,069 | Amber | 6,80 | 130,00 | 60 | 7000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  4428 ⁽¹⁾ | Polyimide Film | SIT | 0,025 | 0,064 | Amber | 6,80 | 131,00 | 80 | 6900 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |
|  4429 ⁽¹⁾ | Polyimide Film | SIT | 0,051 | 0,089 | Amber | 8,20 | 285,00 | 60 | 11000 | 10 ⁶ | A1,0 | BU1 |  |  | E20780 |

| Product | Backing | Adhesive Type | Backing Thickness (mm) | Total Thickness (mm) | Colour(s) | Adhesion to Steel (N/25mm) | Tensile Strength (N/25mm) | Elongation at Break (%) | Breakdown Voltage (V _{eff} VDE 0303) | Insulation Resistance (megaΩ) | Electrolytic Corrosion | Flammability | RoHS | UL-Specification | UL-File-No. |
|---|-------------------------------|---------------|------------------------|----------------------|-----------|----------------------------|---------------------------|-------------------------|--|-------------------------------|------------------------|--------------|------|---|-------------|
| Polyimide Film / Kapton® / Apical® | | | | | | | | | | | | | | | |
|  1018 | Kapton® | Si | 0,025 | 0,060 | Amber | 6,30 | 100,00 | 60 | 6350 | - | - | - | ● | - | - |
|  1018 PV6⁽²⁾ | Polyimide Film | Si | 0,025 | 0,060 | Amber | 6,40 | >88,00 | >40 | 5500 | - | - | - | ● | - | - |
|  11579 | Polyimide Film | AT | 0,025 | 0,072 | Amber | 9,00 | 147,00 | 80 | 7000 | +302°C ⁽⁴⁾ | - | - | ● |  | E338128 |
| Insulation Class C 200°C | | | | | | | | | | | | | | | |
| Polyimide Film / Kapton® / Apical® | | | | | | | | | | | | | | | |
|  1018 PV2⁽¹⁾ | Polyimide Film | SIT | 0,025 | 0,055 | Amber | 6,00 | 113,00 | 70 | 5500 | - | - | - | ● |  | E338128 |
|  1018 PV3⁽¹⁾ | Apical® Polyimide Film | SIT | 0,025 | 0,064 | Amber | 5,90 | 123,00 | 80 | 7000 | - | - | - | ● |  | E338128 |
|  1018 PV4⁽¹⁾ | Kapton® CR ⁵ | SIT | 0,025 | 0,064 | Amber | 5,90 | 137,00 | 80 | 7000 | +260°C ⁽⁴⁾ | - | - | ● |  | E338128 |
|  1018 PV5⁽¹⁾ | Polyimide Film | SIT | 0,025 | 0,055 | Amber | 5,60 | 108,00 | 40 | 5500 | - | - | - | ● |  | E338128 |
|  1018-DS⁽¹⁾ | Polyimide Film (double-sided) | SIT | 0,025 | 0,080 | Amber | 0 12,7 I 1,5 | 127,00 | 70 | 6500 | - | - | - | ● |  | E338128 |
|  1019⁽¹⁾ | Polyimide Film | SIT | 0,050 | 0,090 | Amber | 7,00 | 255,00 | 60 | 6500 | - | - | - | ● |  | E338128 |
|  1019 PV1⁽¹⁾ | Kapton® CR ⁵ | SIT | 0,050 | 0,090 | Amber | 5,90 | 245,00 | 60 | >8000 | +260°C ⁽⁴⁾ | - | - | ● |  | E338128 |
| Glass Cloth | | | | | | | | | | | | | | | |
|  4618⁽¹⁾ | Glass Cloth | SIT | 0,127 | 0,178 | White | 12,30 | 810,00 | 3 | 3000 | 10 ³ | A1,0 | BU1 | ● |  | E20780 |
|  6018 PV3⁽¹⁾ | Glass Cloth | SIT | 0,140 | 0,190 | White | 6,40 | 441,00 | 15 | 3000 | - | - | - | ● |  | E338128 |
|  6018 PV4⁽¹⁾ | Glass Cloth | SIT | 0,120 | 0,180 | White | 9,80 | 558,00 | 10 | 3500 | - | - | - | ● |  | E338128 |
|  6020⁽¹⁾ PV1 | Glass Cloth/ Aluminium | Si | - | 0,190 | Silber | 10,70 | 490,00 | 9 | - | - | - | - | ● | - | - |
|  PTFE 11200-120 | Glass Cloth | Si | 0,120 | 0,165 | - | 15,50 | 625,00 | - | - | +260°C ⁽⁴⁾ | - | - | ● | - | - |
| Antistatic Self-Adhesive Tapes for the Production of Printed Circuit Boards | | | | | | | | | | | | | | | |
|  FM-38 | Polyimide Film | Si | 0,025 | 0,050 | Amber | 4,75 | 82,50 | >50 | - | +280°C ⁽⁴⁾ | - | - | ● | - | - |
| Self-Adhesive Tapes for the Production of Printed Circuit Boards and Powder Coating | | | | | | | | | | | | | | | |
|  6120 | Polyester Film | Si | 0,025 | 0,076 | Blue | 8,20 | 109,00 | 100 | - | +218°C ⁽⁴⁾ | - | - | ● | - | - |
|  6130 | Polyester Film | Si | 0,025 | 0,066 | Red | 8,75 | 114,00 | 120 | - | +204°C ⁽⁴⁾ | - | - | ● | - | - |

| Product | Backing | Adhesive Type | Backing Thickness (mm) | Total Thickness (mm) | Colour(s) | Adhesion to Steel (N/25mm) | Tensile Strength (N/25mm) | Elongation at Break (%) | Breakdown Voltage (V _{eff} VDE 0303) | Insulation Resistance (megaΩ) | Electrolytic Corrosion | Flammability | RoHS | UL-Specification | UL-File-No. |
|---|-------------------------|---------------|------------------------|----------------------|------------------|----------------------------|---------------------------|-------------------------|--|-------------------------------|------------------------|--------------|------|------------------|-------------|
| Self-Adhesive Tapes for the Production of Printed Circuit Boards and Powder Coating | | | | | | | | | | | | | | | |
|  6212 PV3 | Polyester Film | Si | 0,036 | 0,064 | Olive Green | 7,00 | 157,00 | 100 | 5500 | +260°C ⁽⁴⁾ | ● | - | - | - | - |
|  6213 PV3 | Polyester Film | Si | 0,025 | 0,050 | Light Blue, Red | 3,20 | 108,00 | 100 | 5500 | +177°C ⁽⁴⁾ | ● | - | - | - | - |
|  6214 PV1 | Polyester Film | Si | 0,025 | 0,055 | Light Blue | 12,50 | 125,00 | 130 | - | +204°C ⁽⁴⁾ | ● | - | - | - | - |
|  6214 PV2 | Polyester Film | Si | 0,025 | 0,060 | Blue, Black | 8,00 | - | - | >4000 | +220°C ⁽⁴⁾ | ● | - | - | - | - |
|  6214 PV3 | Polyester Film | Si | 0,025 | 0,060 | Green, Red, Blue | 7,40 | 98,00 | 80 | 5500 | +204°C ⁽⁴⁾ | ● | - | - | - | - |
|  6214 DS | Polyester Film | Si | 0,023 | 0,100 | Green | 10,00 | - | - | - | +220°C ⁽⁴⁾ | ● | - | - | - | - |
|  6215 PV1 | Polyester Film | Si | 0,050 | 0,085 | Green | 11,60 | 209,80 | 165 | >4000 | +220°C ⁽⁴⁾ | ● | - | - | - | - |
|  6215 PV3 | Polyester Film | Si | 0,050 | 0,080 | Green | 9,30 | 221,00 | 135 | 8000 | +177°C | ● | - | - | - | - |
|  6215 PV4 | Polyester Film | Si | 0,050 | 0,080 | Black | 7,00 | 175,00 | 100 | 7000 | +200°C ⁽⁴⁾ | ● | - | - | - | - |
|  6215 PV6 | Polyester Film | Si | 0,050 | 0,080 | Green | 9,30 | 221,00 | 135 | 8000 | +177°C | ● | - | - | - | - |
|  6215 DS | Polyester Film | Si | 0,050 | 0,125 | Red, Clear | 6,25 | - | - | - | +220°C ⁽⁴⁾ | ● | - | - | - | - |
|  6057V | Plasticized Rayon Cloth | RT | 0,190 | 0,230 | Grey | 9,90 | 146,00 | 10 | 1500 | +180°C ⁽⁴⁾ | ● | - | - | - | - |
| Conductible Metal Self-Adhesive Tapes | | | | | | | | | | | | | | | |
|  4384 PV1 | Copper Film | AS | 0,025 | 0,065 | - | 7,12 | 6,87 | - | - | +180°C ⁽⁴⁾ | ● | - | - | - | - |

*) 9 colours: Yellow, Red, Blue, Black, Green, White, Clear, Anthracite Gray, Copper Brown

**) 7 colours: Yellow, Red, Blue, Black, Green, White, Clear

1) Passes UL 510 Flame Retardancy 2) ESD-Shielding 3) Zone Coated 4) Temperature Resistance 5) Corona Resistant

Nomex®, Kapton® und Teflon® are registered Trade names of DuPont de Nemours. Apical® is the Trade name of KANEKA, Japan.

UL-certified Converter



Volz Selbstklebetechnik GmbH has been a UL-certified Converter since 2012, independent of the material manufacturer. This ensures that the UL listings of the materials we convert remain valid.

Volz Selbstklebetechnik GmbH has the following UL listings:

- E354783 (TEOU2) - Repackaged Recognized Components
- E354783 (TEOU8) - Repackaged Recognized Components Certified for Canada
- E338128 (OANZZ) - Insulating Tape Component



Quality and Environmental Management Certified

Occupational Health & Safety Seal



| Product | Core insulation, inter layer insulation | Insulation for soldering and welding spots | Strain relief for supply lines | Closing bandage | Masking of self-supporting coils | Masking winding ends | Protection for resin treatment | Masking for multiple coil winding | Fastening of non-sticking insulation | Spiral head and phasing insulation | Masking for gold contacts, strip conductors and wave soldering | Product |
|--------------|---|--|--------------------------------|-----------------|----------------------------------|----------------------|--------------------------------|-----------------------------------|--------------------------------------|------------------------------------|--|--------------|
| 51587 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 51587 |
| 51588 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 51588 |
| 51594 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 51594 |
| 54108 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 54108 |
| 50501 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 50501 |
| 51589 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 51589 |
| 54113 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 54113 |
| 54143 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 54143 |
| 11350-1 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 11350-1 |
| 11350-2 | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 11350-2 |
| 11350-1-DS | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | 11350-1-DS |
| 4560 | | | ● | ● | ● | ● | | ● | ● | ● | | 4560 |
| 5060 PV3 | | | ● | ● | ● | ● | | ● | ● | ● | | 5060 PV3 |
| 5060 PV4 | | | ● | ● | ● | ● | | ● | ● | ● | | 5060 PV4 |
| 4138 | ● | | | ● | ● | ● | | ● | ● | ● | | 4138 |
| 4564 | | | | ● | ● | ● | | | ● | ● | | 4564 |
| 11600 PV3 | | | ● | ● | ● | | ● | ● | ● | ● | | 11600 PV3 |
| 4426 | ● | ● | ● | | | ● | | | | ● | | 4426 |
| 4427 | ● | ● | ● | | | ● | | | | ● | | 4427 |
| 51578 | ● | ● | ● | | | ● | | | | ● | | 51578 |
| 54354 | ● | ● | ● | ● | ● | | | | | ● | | 54354 |
| 51596 | ● | ● | ● | ● | ● | ● | | | | ● | | 51596 |
| 51245 | ● | ● | ● | ● | ● | ● | | | | ● | | 51245 |
| 51599 PV1 | | | ● | ● | ● | ● | | | | | | 51599 PV1 |
| 51595 | ● | ● | ● | ● | ● | ● | | | | ● | | 51595 |
| 11044-04 PV3 | ● | ● | ● | ● | ● | ● | | | | ● | | 11044-04 PV3 |
| 11044-08 PV3 | ● | ● | ● | ● | ● | ● | | | | ● | | 11044-08 PV3 |
| 51597 | | | ● | ● | ● | ● | | | | | | 51597 |
| 11597 | | | ● | ● | ● | ● | | | | | | 11597 |
| 4237 | | | ● | ● | ● | ● | | | | | | 4237 |
| 4238 | | | ● | ● | ● | ● | | | | | | 4238 |
| 4238 PV3 | | | ● | ● | ● | ● | | | | | | 4238 PV3 |
| 2036 PV1 | | | ● | ● | ● | ● | | | | | | 2036 PV1 |
| 4616 | | | ● | ● | ● | ● | ● | | | ● | ● | 4616 |
| 4617 | | | ● | ● | ● | ● | ● | | | ● | ● | 4617 |
| 4627 | | | ● | ● | ● | ● | ● | | | ● | ● | 4627 |

| Product | Core insulation, Inter layer Insulation | Insulation for soldering and welding spots | Strain relief for supply lines | Closing bandage | Masking of self-supporting coils | Masking winding ends | Protection for resin treatment | Masking for multiple coil winding | Fastening of non-sticking insulation | Spiral head and phasing insulation | Masking for gold contacts, strip conductors and wave soldering | Product |
|----------------|---|--|--------------------------------|-----------------|----------------------------------|----------------------|--------------------------------|-----------------------------------|--------------------------------------|------------------------------------|--|----------------|
| 6017 PV3 | | | ● | ● | ● | ● | ● | | | ● | ● | 6017 PV3 |
| 6017 PV4 | | | ● | ● | ● | ● | ● | | | ● | ● | 6017 PV4 |
| 6017 PV5 | | | ● | ● | ● | ● | ● | | | ● | ● | 6017 PV5 |
| 41356 PV2 | | ● | ● | ● | | | | | | ● | | 41356 PV2 |
| 41356 PV3 | | ● | ● | ● | | | | | | ● | | 41356 PV3 |
| 61228 PV3 | ● | | | ● | | | | | | ● | | 61228 PV3 |
| 61228 PV4 | ● | | | ● | | | | | | ● | | 61228 PV4 |
| 51579 | ● | | | ● | ● | | ● | ● | ● | | | 51579 |
| 11579 | ● | | | ● | ● | | ● | ● | ● | | | 11579 |
| 11202 PV3 | ● | | | ● | ● | | | | | ● | ● | 11202 PV3 |
| 4118 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 4118 |
| 1018 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 |
| 4428 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 4428 |
| 4429 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 4429 |
| 1018 PV2 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 PV2 |
| 1018 PV3 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 PV3 |
| 1018 PV4 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 PV4 |
| 1018 PV5 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 PV5 |
| 1018 PV6 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018 PV6 |
| 1018-DS | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1018-DS |
| 1019 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1019 |
| 1019 PV1 | ● | ● | | ● | ● | | ● | ● | ● | | ● | 1019 PV1 |
| 4618 | | | ● | ● | ● | ● | ● | | | ● | ● | 4618 |
| 6018 PV3 | | | ● | ● | ● | ● | ● | | | ● | ● | 6018 PV3 |
| 6018 PV4 | | | ● | ● | ● | ● | ● | | | ● | ● | 6018 PV4 |
| 6020 PV1 | | | | | | | | | | | | 6020 PV1 |
| PTFE 11200-120 | | | | | | | | ● | | | | PTFE 11200-120 |
| FM-38 | | | | | | | | | | | ● | FM-38 |
| 6120 | | | | | | | | | | | ● | 6120 |
| 6130 | | | | | | | | | | | ● | 6130 |
| 6212 PV3 | | | | | | | ● | | | | | 6212 PV3 |
| 6213 PV3 | | | | | | | | | | | | 6213 PV3 |
| 6214 PV1 | | | | | | | | | | | ● | 6214 PV1 |
| 6214 PV3 | | | | | | | | | | | ● | 6214 PV3 |
| 6215 PV1 | | | | | | | | | | | ● | 6215 PV1 |
| 6215 PV3 | | | | | | | | | | | ● | 6215 PV3 |
| 6215 PV4 | | | | | | | ● | | | | | 6215 PV4 |
| 6057V | | | | | | | | | | | ● | 6057V |
| 4384 PV1 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 4384 PV1 |

Polyester Films



Polyester Films have a high insulation and dielectric strength, despite a lesser foil thickness (25µm). They are also resistant to chemicals and solvents due to the acrylic adhesive used. Polyester foils are mainly used for the following applications:

- Core and inter layer insulation, strain relief for supply lines, closing tapes, masking of self-supporting coils as well as masking winding ends, spiral head insulation, phases disconnection
- Fastening of non-sticking insulation
- Masking in multiple coil winding insulation or during impregnating resin varnish treatment

Polyester Laminates



Polyester Laminates are coated with two different carrier layers and therefore have excellent properties. Paper/polyester laminates offer strength, stability and intrinsic stiffness and can be easily torn-off by hand. Polyester/Polyester-fleece laminates offer high resistance to sharp-edged and punctual pressure, as well as a padded protective function. Polyester laminates are mainly utilized for:

- Core and inter layer insulation, insulation of soldered and welded joints as well as supply lines, strain relief for supply lines, closing bandages
- Masking of self-supported coils, as well as masking winding ends

Polyester Reinforced with Glass Filament



These adhesive tapes are mainly used as protective tapes for oil transformers where bundling of large and heavy single coils is required. The glass filament provides a high tensile strength and the polyester film a high dielectric strength. Typical applications are:

- Strain relief for supply lines, as closing masking bandages at the beginning and end of winding
- Masking of winding ends

Glass Cloth



Glass cloth tapes are especially conformable and flexible. Due to their high temperature resistance and strong tensile strength, glass cloth tapes are ideal for any insulation application. Due to the different glue adhesive systems, glass cloth tapes are available for all insulation classes. Applications:

- Strain relief for supply lines, masking bandage
- Masking of self-supporting coils as well as masking of winding ends
- Spiral head insulation, phases disconnection, masking for impregnating resin varnish treatment

Specialty Tapes



These tapes have unique properties and are used especially for high voltage insulation. They consist of special carrier materials, such as Teflon®, Nomex®, Polyester Cloth or acetate silk cloth. The strip coating of Intertape® 4564, allows complete impregnation of lacquers and resins. These adhesive tapes may be implemented in any area.

Polyimide Film



Polyimide film tapes are used when high temperatures are required. They are also often used for applications outside electrical engineering. Polyimide foils withstand short-term temperature ranges of 120°C up to 350°C and have a very high dielectric strength. Typical applications are:

- Core and inter layer insulation, masking self-supporting coils as well as winding ends
- Insulation of soldered and welded joints as well as supply lines, closing bandages
- Masking in multiple coil winding or during impregnating resin treatment
- Fastening of non-sticking insulation
- Masking for wave soldering, circuit boards and gold contacts

Temperature Rating

Each adhesive tape is assigned to a specific insulating material class or heat class on the basis of its continuous heat load capacity. The respective letter indicates the highest continuous temperature to which the adhesive tape may be subjected. Testing is carried out at a constant temperature for 20,000 hours.

| Classification according to DIN EN 60085 | | Classification according to UL 1446 | | | |
|--|-------------------|-------------------------------------|-----------------|-----------------------------------|-----------------------------------|
| Insulation Class | Temperature Limit | USA (OANZZ) | Canada< (OANZ8) | Maximum hot-spot temperature (°C) | Maximum hot-spot temperature (°F) |
| Y | 90°C | - | - | - | - |
| A | 105°C | - | - | - | - |
| E | 120°C | 120°C (E) | - | 120°C | 248°F |
| B | 130°C | 130°C (B) | B | 130°C | 266°F |
| F | 155°C | 155°C (F) | F | 155°C | 311°F |
| H | 180°C | 180°C (H) | H | 180°C | 356°F |
| N | 200°C | 200°C (N) | C | 200°C | 392°F |
| R | 220°C | 220°C (R) | C | 220°C | 428°F |
| - | - | 240°C (S) | C | 240°C | 464°F |
| 250 | 250 | >240°C (C) | C | >240°C | >464°F |

| Adhesive Masses | | Adhesive Properties | |
|-----------------|---|--|--|
| A | Acrylic | Acrylic | |
| AT | Acrylic – thermosetting | Acrylic adhesive is resistant to UV radiation, light and aging, and is compatible with impregnating and trickle resins. Acrylic adhesives are resistant to solvents and some oils. The combination of synthetic polymers is thinner than with rubber adhesive. | |
| AS | Acrylic with silver particle | Natural Rubber Adhesive | |
| R | Natural Rubber | The addition of resins and antioxidants results in a strong and impregnation resistant adhesive compound, which is, however limited in its temperature range. | |
| RT | Natural Rubber - thermosetting | Silicone | |
| RTF | Natural Rubber - thermosetting, flame retardant | Only polysiloxane adhesive compounds meet the requirements of insulation class H (180°C continuous temperature). In combination with a non-flammable carrier (polyimide, glass cloth, etc.), an adhesive tape for extreme applications will be obtained. | |
| Si | Silicone | Thermosetting | |
| SiT | Silicone - thermosetting | The adhesive mass is solidified when heated or cured, thus decisively improving its resistance to impregnating agents. | |

| Thermosetting Cycles | | Slitting Tolerance | |
|---|--|--|-------------------|
| Acrylic- and Rubber Adhesives Thermosetting | Silicone Adhesives Thermosetting | Film | ± 0,4mm (± 1/64") |
| 1 hour at 150°C | 2 hours at 260°C | Cloths | ± 0,4mm (± 1/64") |
| 2 hours at 130°C | 24 hours at 260°C / for maximum solvent resistance | Laminates | ± 0,4mm (± 1/64") |
| 3 hours at 120°C | | Length > 100m | ± 0,8mm (± 1/32") |
| | | Smaller cutting tolerances possible by request | |

| Storage Conditions | |
|--|--|
| Tape rolls should be stored in their original cartons, upright and not in a horizontal position. Always protect the tape from sunlight. For the best shelf life, storage temperature should be between 15°C and 25°C with a relative humidity of 50% (± 30%). Tapes stored below 15°C, should be kept at room temperature for at least 24 hours before use to ensure that the tape regains its distinctive properties. | |

