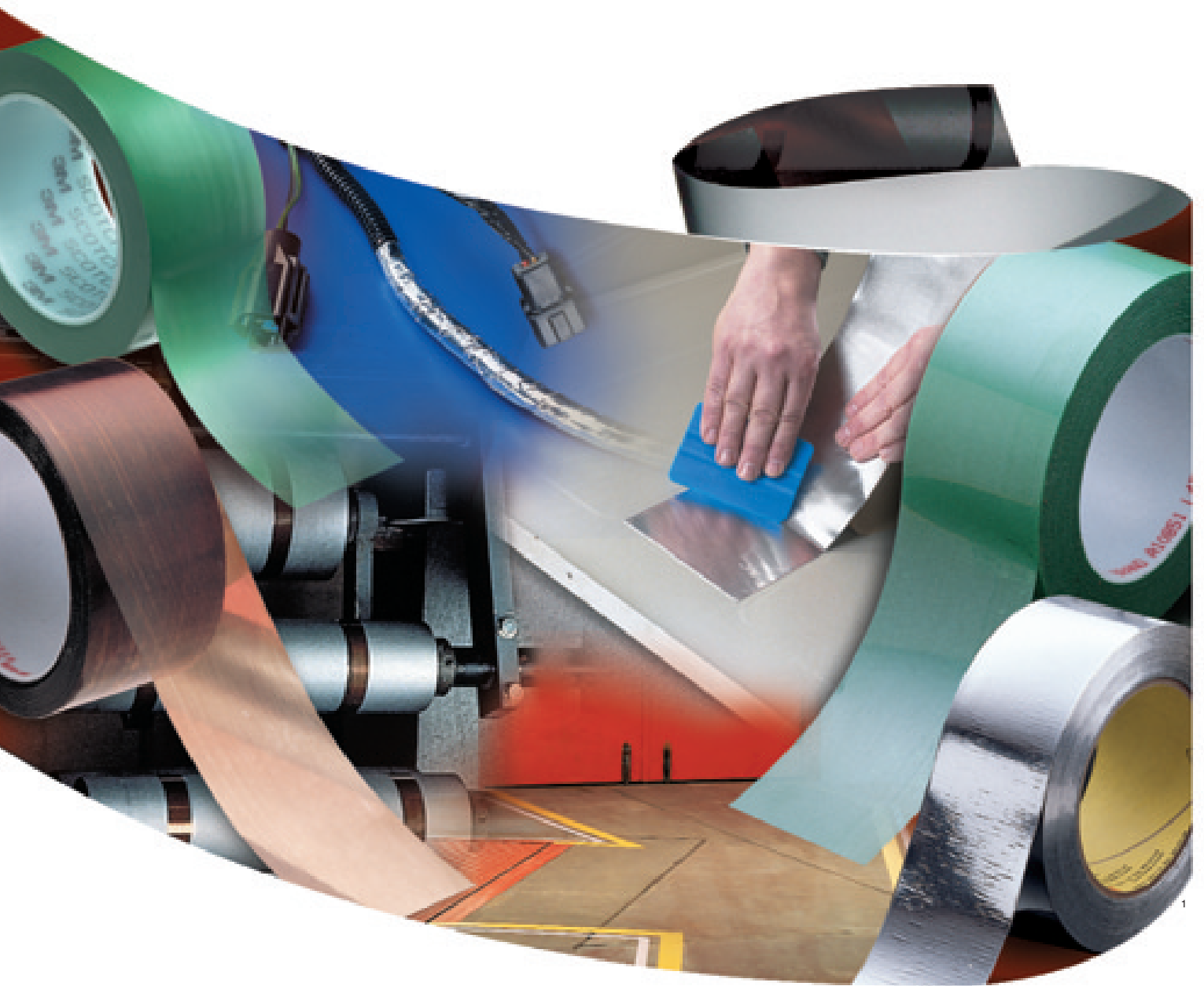


**3M**

# Specialty Tape Solutions

*Bringing better ideas to the surface with  
metal foil, vinyl, polyester, and specialized tapes*



# Resist, conduct, reflect, protect, mark, mask, repel, color-code, s



3M™ Metal Foil Tapes – choice of conformable high performance backings

3M™ Vinyl Tapes – locked-in color and aggressive adhesive that removes cleanly



Example: 3M™ Aluminum Foil Tape 425 for aircraft paint stripping masking and heat reflection

**KEY MARKETS** • Aerospace  
• Metal finishing • Concrete repair  
• Appliance • Automotive

## Typical Applications

- Aircraft paint stripping • Metal plating masking
- Dust/moisture cover • Heat-resistant wiring harness
- Sound and vibration damping
- Enhance cooling efficiency of copper refrigeration coils
- Electronic, appliance, transportation and manufacturing equipment.

### 3M™ Aluminum Foil Tapes

- Resist flame, moisture, weather, UV degradation, and most chemicals
- Thermally conductive for heating/cooling efficiency

### 3M™ Lead Foil Tapes

- Electrically conductive
- Acid resistant for plating
- Radiopaque for X-ray markers

### 3M™ Aluminum Foil Reinforced Tapes

- Flexible flame-resistant wrap for wires and hoses
- Tear and puncture resistant

### 3M™ Damping Foil Tapes

- Viscoelastic polymer with aluminum constraining layer to help quiet metal and plastic
- Self-fixturing



Example: 3M™ Vinyl Tape 471 for lane and safety markings, color coding, and general purpose

**KEY MARKETS**  
• Maintenance and Repair (MRO)  
• Metal finishing

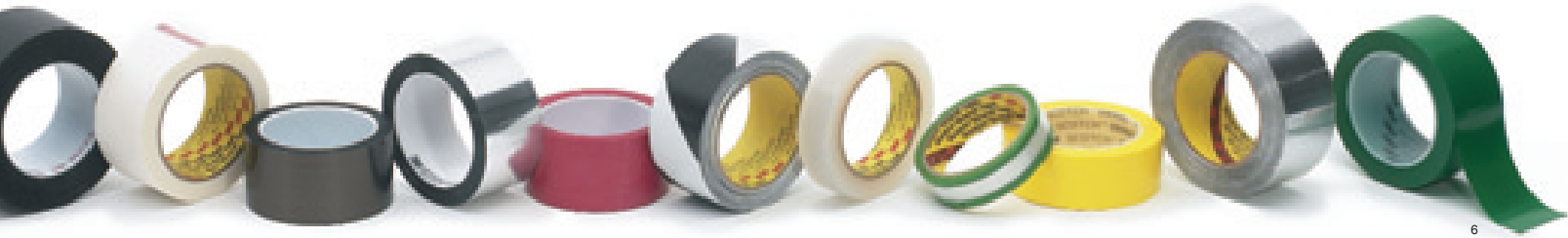
## Typical Applications

- Mark and identify lanes, hazards, and safety equipment
- Color code piping, tools, instruments, and more.
- Seal riveted seams • Add decorative trim • Electroplate masking
- Fine line paint masking

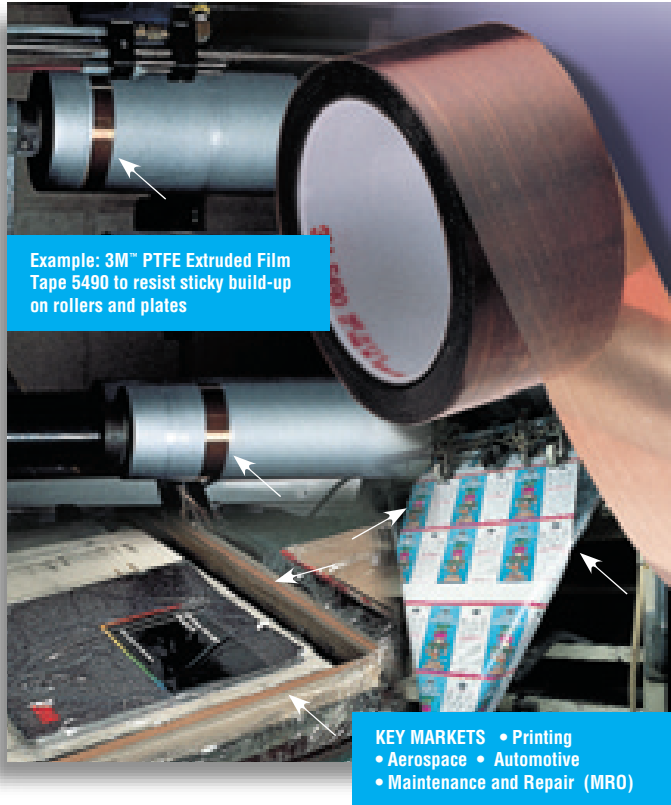
## Typical Characteristics

- “Color-throughout” construction that resists scrapes, wear, weathering, and chemicals
- Black, blue, brown, green, orange, red, white, purple, yellow, and transparent
- Aggressive pressure sensitive adhesive bonds and seals to most surfaces on contact
- Easy, clean removal for temporary applications
- Readily stretch, mold, form, press, or cut to fit
- Conforms to irregular surfaces
- Provides sharp masking edge

Slide, cover, and quiet.



**3M™ Slick Surface Tapes – low coefficients of friction with choice of other characteristics**



**Typical Applications**

- Protect plastic contact bar under hot wire in shrink wrapping
- Wrap web rollers for smoother material movement; cover web former edge to minimize friction during folding
- “Slip plane” between dissimilar surfaces to help reduce noise
- Masking and bundling in composite part manufacturing

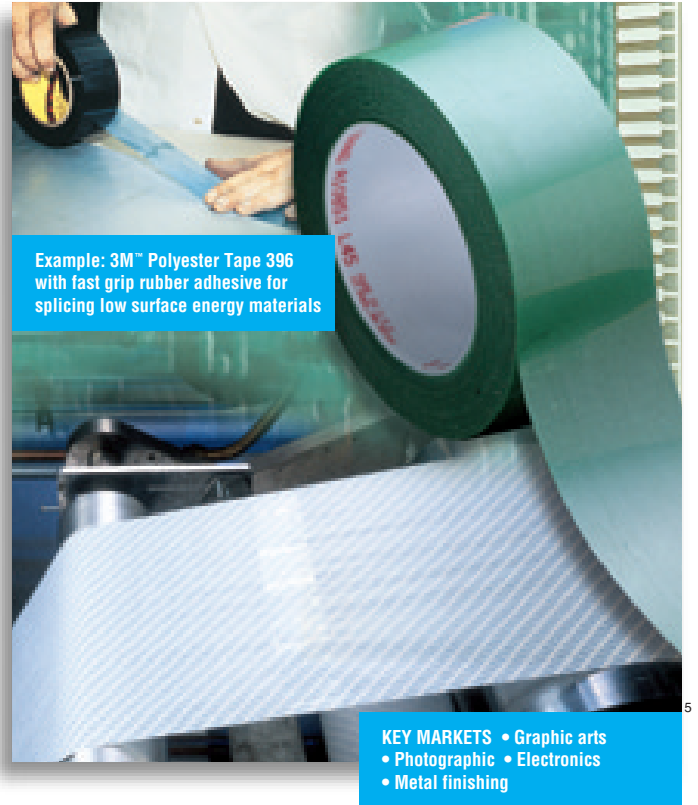
**3M™ PTFE Tapes:**

- Self-lubricating to help improve web material processing
- Resists up to 400°F (204°C)
- Anti-stick for ready release and clean-up of even hot plastic
- Conforms for a chemical-resistant barrier
- Available in glass cloth and skived or extruded films

**3M™ UHMW-PE Tapes**

- Abrasion resistant to protect chutes from wear
- “Slip plane” effect between surfaces to reduce noise
- Anti-stick for ready release and clean-up of various inks, adhesives, and sealants
- Available in film and film/foam

**3M™ Polyester Tapes – thin caliper with long-term high dimensional strength**



**Typical Applications**

- Stripping positives or negatives in graphics arts pre-press
- Splicing silicone-treated papers • Powder coat paint masking
- Gold finger masking in PCB plating • De-taping
- High temperature coating • Edge and hole reinforcing
- Thin caliper butt splicing • Add low profile decorative trim

**Typical Characteristics**

- Choice of backing calipers from as thin as 0.9 mil up to 5 mils
- Choice of tensile strength ranging from 20 lbs./in. (1 mil backing) to 127 lbs./in. (5 mils backing)
- Choice of pressure sensitive acrylic, rubber, silicone, and S/R blend adhesives to meet

- specific requirements. For example, acrylic for long term holding and clarity; silicone for high temperature performance and clean removal; specially-formulated rubber for resistance to plating chemicals
- Polyester backings perform reliably exposed to 350° F (177°C) for one hour

## Variety of other 3M™ Tapes for process and design solutions



### Typical Applications

Wide variety from glass cloth tape for fabric splicing to adhesive-less PTFE tape for pipe thread sealing. See specific tapes at right for typical applications and characteristics.

### 3M™ Glass Cloth Tapes

- Typical applications: thermal spray masking; splicing fabric and other textured surfaces; aircraft cargo hold seaming and sealing
- Tensile strength up to 190 lbs./in. and 7x higher than typical polyester tapes
- Temperature resistance up to more than 400°F (204°C) for one hour – even higher for intermittent exposures
- Passes FAA flame resistance regulations

### 3M™ Riveting Tapes

- Hold rivets during bucking without trapping
- Choice of 1.0 mil polyester with rubber adhesive, or 2 mil polyethylene with acrylic adhesive

### 3M™ Venting Tapes

- Acrylic adhesive and non-woven, air-permeable backing holds foam-in place insulation inside doors and appliances

### 3M™ Lithographer's Tape

- Ruby red transparent UPVC backing is visually translucent, yet photographically opaque for lithographic stripping
- Rubber adhesive is long aging and transfer-resistant

### 3M™ Specialty Tapes

- Unique backings and adhesives for a wide range of applications and characteristics such as the following and more:
  - Silicone butt splicing
  - Tedlar® Film backing for weather resistance
  - Silicone rubber backing for high friction rollers
  - Adhesive-less PTFE tape for pipe thread sealing

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