PRESSURE SENSITIVE TAPES

FOR

PRINTED CIRCUIT BOARD ASSEMBLY

PPI Adhesive Products Ltd.
Waterford Industrial Estate
Cork Road
Waterford
Republic of Ireland

Telephone: +353 (0) 51 590400
Main Fax: +353 (0) 51 377687
R&D Fax: +353 (0) 51 373558
Email: info@ppi.ie
Internet: www.ppi.ie

A Brand Of Quality To Rely On...
PPI ADHESIVE PRODUCTS LTD was originally established in 1970 and commenced production at Waterford Industrial Estate in 1971. Through our commitment to continuous product improvement and product innovation, PPI Adhesive Products Ltd., has grown to become a world-renowned supplier on a global scale to PCB Assemblers and their associated industries. Our comprehensive range of standard "PCB tape products" has become synonymous with the word “quality” and have been used and approved by an ever-growing number of leading electronic assembly companies.

In recent years, we have been instrumental in introducing to the marketplace a most progressive series of products. These range from tapes for PCB masking applications, to specialty products for both EMI shielding and thermal conductivity, as well as a range of premium quality labelstock and pressure sensitive anti-static cover tapes, which are used to package surface mount devices into blister pack carrier reels. These innovations, like all PPI products, have been to the forefront in terms of offering PCB assemblers improved process productivity, efficiencies and product quality.

Some of our previous original developments have been, the patented PPI 2000 family of novel solvent soluble PCB masking tapes and also our range of water-soluble PCB masking tapes. Likewise, we lead the field in the introduction and patenting of PPI RD-042 D, an anti static high temperature masking tape. This was the first high temperature anti-static solder wave masking tape, which was developed with PPI technology for the PCB industry. PPI RD-042 D represented a revolution in the area of static reduction during PCB assembly, where the negative effects of unwanted electro-static discharges are well known.

We in the PPI group of companies have the experience and the capability to offer products and services to all of our customers, which can fulfill applications ranging from small developing niche areas to highly demanding technical challenges.

*PPI - We don't just sell tape ... we sell quality solutions...*
WAVE SOLDER MASKING TAPES

We produce a series of high temperature resistant solder wave masking tapes that are capable of being used even in the very demanding conditions (ca. 300°C) associated with lead-free soldering processes. These products can be supplied in roll form, standard dot sizes and also special die-cut formats suited to your very own requirements.

<table>
<thead>
<tr>
<th>PPI TYPE</th>
<th>PPI 701</th>
<th>PPI 702</th>
<th>PPI RD-042D</th>
<th>PPI SP-255</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Material</td>
<td>Polyimide Film</td>
<td>Polyimide Film</td>
<td>Special Polyimide Film</td>
<td>Crepe Paper</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>0.055mm</td>
<td>0.085mm</td>
<td>0.060mm</td>
<td>0.160mm</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Silicone</td>
<td>Silicone</td>
<td>Silicone</td>
<td>Silicone</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>2.0 N/cm</td>
<td>3.5 N/cm</td>
<td>1.0 N/cm</td>
<td>2.0 N/cm</td>
</tr>
<tr>
<td>Temperature Resistance</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 260°C</td>
</tr>
<tr>
<td>Colour</td>
<td>Brown Transparent</td>
<td>Brown Transparent</td>
<td>Brown Opaque</td>
<td>Buff</td>
</tr>
</tbody>
</table>

**PPI 701:** A high temperature resistant masking tape based on polyimide film coated with a silicone adhesive layer that has an optimum balance of tack and adhesion. PPI 701 is readily removable from a PCB surface after the reflow process without causing any adhesive residue making it the ideal choice for gold finger masking applications.

**PPI 702:** A thicker version of the PPI 701, due to a thicker adhesive layer. This product possesses increased tack and adhesion particularly onto uneven PCB surfaces.

**PPI RD-042D:** Through it’s unique and patented construction (File EP 0 422 919), PPI RD-042D is the original anti-static PCB high temperature masking tape and is widely used in the production of premium quality PCB’s where static reduction is critical.

**PPI SP-255:** A crepe paper based high temperature masking tape, which is flexible and hand tearable.
**Hot Air Levelling Masking Tape**

Hot Air Levelling (HAL) is a challenging high-temperature solder process, which involves exposure to high air pressure. Due to these severe demands many lightweight tapes are unsuitable and a more robust tape is required. **RD-487 D** has been specifically developed for the HAL masking process. This tape possesses an excellent balance of high temperature and high mechanical resistance and is residue free upon removal.

**Electroplating Tapes**

During the PCB production process, copper contacts are electroplated to produce “gold fingers”. PPI masking tapes for electroplating are used to prevent plating over areas of the PCB where it is not required. Our tapes are conformable, have excellent chemical resistance, and are removable without any trace of adhesive residue. There is also a non–silicone version available for specific applications.

<table>
<thead>
<tr>
<th><strong>PPI TYPE</strong></th>
<th><strong>PPI-487D</strong></th>
<th><strong>PPI-289</strong></th>
<th><strong>PPI RD-397B</strong></th>
<th><strong>PPI -105</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Material</strong></td>
<td>Paper/Polyester</td>
<td>Polyester Film</td>
<td>Polyester Film</td>
<td>Polyester Film</td>
</tr>
<tr>
<td><strong>Total Thickness</strong></td>
<td>0.250mm</td>
<td>0.100mm</td>
<td>0.070mm</td>
<td>0.055mm</td>
</tr>
<tr>
<td><strong>Adhesive</strong></td>
<td>Silicone</td>
<td>Rubber</td>
<td>Silicone</td>
<td>Silicone</td>
</tr>
<tr>
<td><strong>Adhesive Strength</strong></td>
<td>5.0 N/cm</td>
<td>2.6 N/cm</td>
<td>4.0 N/cm</td>
<td>3.0 N/cm</td>
</tr>
<tr>
<td><strong>Temperature Resistance</strong></td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 100°C</td>
<td>Short Term Up to 200°C</td>
<td>Short Term Up to 200°C</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Grey</td>
<td>Green</td>
<td>Green</td>
<td>Blue</td>
</tr>
</tbody>
</table>

**PPI RD-487D**: Has been specifically developed for H.A.L masking process. It has a robust construction based on a special paper/polyester laminate that is then coated with a high adhesion silicone adhesive layer. This product has been designed to resist high-pressure air blast associated with the HAL process.

**PPI 289**: A polyester film based tape with a non-silicone, rubber based adhesive. This tape has a thick adhesive layer and is ideal for masking over contoured surfaces during electroplating. **Silicone free**

**PPI RD-397B**: Based on a polyester film with a thick layer of silicone adhesive that also makes it very suitable for masking uneven or contoured surfaces. Because of it’s superior adhesive stability it is recommended for the more demanding applications involving high temperature processes.

**PPI-105**: Standard polyester based masking tape for electroplating processes
THERMAL MANAGEMENT TAPES

Because of the constant drive within the global electronics industry to reduce component size, comes the ever-increasing need to protect parts from overheating. PPI has developed a series of pressure sensitive thermal management tapes that combine the benefits of rapid and permanent component positioning with component protection. This is achieved through dissipation of heat from the sensitive components and devices throughout their lifetime. These tapes are used as thermal interfaces for bonding heat sinks onto electronics devices to protect them from damage due to overheating. These products can be die cut into a wide variety of forms that can offer considerable handling and application advantages when compared to the combination of thermally conductive greases and component clip holding techniques.

<table>
<thead>
<tr>
<th>PPI TYPE</th>
<th>PPI RD-339C</th>
<th>PPI RD-628</th>
<th>PPI RD-281G</th>
<th>PPI RD-281H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Material</td>
<td>Soft Aluminium Foil</td>
<td>Soft Aluminium Foil</td>
<td>Thermally Conductive Polyimide</td>
<td>Thermally Conductive Polyimide</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>0.160mm</td>
<td>0.210mm</td>
<td>0.060mm</td>
<td>0.095mm</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Thermally Conductive Acrylic</td>
<td>Thermally Conductive Acrylic</td>
<td>Flame Retardant Thermally Conductive Acrylic</td>
<td>Flame Retardant Thermally Conductive Acrylic</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>5.5 N/cm</td>
<td>6.5 N/cm</td>
<td>3.0 N/cm</td>
<td>3.0 N/cm</td>
</tr>
<tr>
<td>Temperature Resistance</td>
<td>Up to 155°C</td>
<td>Up to 155°C</td>
<td>Up to 180°C</td>
<td>Up to 180°C</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
<td>White</td>
<td>White / Orange</td>
<td>White</td>
</tr>
</tbody>
</table>

RD-339C: This tape is based on an aluminium foil, which has been coated on both sides with a thermally conductive permanently bonding acrylic adhesive. Capable of operating up to 155°C.

PPI RD-628: A thicker version of the RD-339 C, the RD-628 possesses higher adhesion and is more suitable for bonding to irregular surfaces.

RD-281 G & H: Specialist thermal management tapes based on thermally conductive polyimide film, specifically designed for high dielectric applications. RD-281G is a single coated version that is normally used in conjunction with mechanical fastening. RD-281H is adhesive coated both sides.

** Specific Data Sheets Available On Request **
HIGH TEMPERATURE LABELS FOR PCB IDENTIFICATION

PPI Adhesive Products has been manufacturing and converting high performance label products for PCB identification for many years. Whether the process requires labels for the PCB topside labelling or the more severe PCB bottom side labelling requirements, PPI has the product to suit your needs. From special anti-static versions to surface coated products, PPI Adhesive products can offer the end user versatility in choosing the optimum material to suit their barcode needs and requirements.

PPI Labelstock products can be supplied in roll format to suit converters needs and can also be offered in precision die-cut format direct to the end user.

PPI L-133
Based on white polyester film PPI L-133 is suitable for barcode printing using a wide range of thermal transfer ribbons and printers. This label product can withstand temperatures up to 155°C and also exposure to a wide range of chemicals / solvents. It is recommended for many label applications, including topside PCB label identification of boards and their components.

PPI L-133 is available as standard in a range of thicknesses depending on particular requirements.

UL PGJ12 LISTED

PPI L-139A
Based on a polyimide film coated with a specially formulated white printable layer. This product is suitable for PCB bottom side labelling conditions that are often too aggressive for polyester based products. Due to its polyimide base film, L-139A is heat resistant up to 300°C short term making it suitable for direct exposure to molten solder and many aqueous based cleaning fluids.

The smooth printable layer ensures PPI L-139A is thermal transfer printable using a wide variety of thermal transfer ribbons and printers.

** Specific Data Sheets Available On Request **
PPI RD-514
RD-514 is based on polyimide film coated with a highly resistant printable coating that has been designed for printing with high quality resin based thermal transfer ribbons. Recommended for all labelstock applications in extreme or harsh environments because of its resistance to many organic cleaning solvents and wash solutions. Suitable for similar applications to L-139A, but recommended for those with more aggressive cleaning solvents.

<table>
<thead>
<tr>
<th>PPI TYPE</th>
<th>PPI L-133</th>
<th>PPI L-139A</th>
<th>PPI RD-514</th>
<th>PPI RD-689</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Material</td>
<td>Polyester Film</td>
<td>Polyimide Film</td>
<td>Polyimide Film</td>
<td>Special Construction Polyimide Film</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>0.050mm 0.075mm</td>
<td>0.065mm 0.090mm</td>
<td>0.075mm 0.100mm</td>
<td>0.100mm</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Acrylic</td>
<td>Acrylic</td>
<td>Acrylic</td>
<td>Acrylic</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>4.0 N/cm</td>
<td>2.5 N/cm</td>
<td>2.5 N/cm</td>
<td>1.5 N/cm</td>
</tr>
<tr>
<td>Temperature Resistance</td>
<td>Short Term Up to 200°C</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 300°C</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
<td>White</td>
<td>White</td>
<td>White</td>
</tr>
<tr>
<td>Interliner</td>
<td>White release coated paper</td>
<td>White release coated paper</td>
<td>White/Brown release coated paper</td>
<td>White release coated paper</td>
</tr>
</tbody>
</table>

PPI RD-689
RD-689 is an anti-static version of the popular RD-514 high-temperature polyimide labelstock. Due to its special adhesive construction RD-689 prevents any static discharge during removal from its interliner or from sensitive components after use. Specifically designed for use in environments where the reduction of electro-static discharge is critical for sensitive component protection.

RD-689 can withstand temperatures up to 300°C short term making it suitable for direct exposure to molten solder.
Pressure sensitive anti-static cover tape is used to tape surface mount components and devices securely into preformed blister pack carrier reels in which they are packaged. These special products ensure secure protection of components during transport and also against ESD damage during the packaged lifetime of the components. The specially formulated adhesives provide an even peel from the various carrier reels and this prevents any interruption of components during pick and place operation when loading PCB’s.

**FEATURES AND BENEFITS**

**Application**

Unlike heat activated cover tapes, pressure sensitive cover tapes only require the application of pressure to form sufficient bonds to the various types of moulded carrier reels, e.g. PVC, polycarbonate, polystyrene.

**Adhesive**

The specially formulated pressure sensitive adhesives used on this range of products have been specifically designed for compatibility with a range of carrier reels resulting in controlled peel values upon de-taping. The smooth peel characteristic of these adhesives ensures that the packaged components will remain in the correct position during removal of the tapes. Unlike heat activated cover tape, the PSA allows the packaged reel to be opened at any point for component inspection or repair.

**Construction:** The special laminated construction guarantees ESD protection of the packaged components. The transparency of the tape allows visual inspection of components and devices.

---

**STANDARD COVER TAPE WIDTHS (MM)**

<table>
<thead>
<tr>
<th>Cover Tape Width</th>
<th>9.3</th>
<th>13.3</th>
<th>21.3</th>
<th>25.5</th>
<th>37.5</th>
<th>49.5</th>
<th>65.5</th>
<th>81.2</th>
<th>113.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesive Edge each side</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Blister Pack Carrier Width</td>
<td>12</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>44</td>
<td>56</td>
<td>72</td>
<td>88</td>
<td>120</td>
</tr>
</tbody>
</table>

**Non standard sizes available on request**  **Specific data sheets available**
**PPI LM-860D**

Anti static cover tape that provides a smooth **controlled level of adhesion** to a wide selection of blister packs due to its specially formulated acrylic adhesive. The surface of the tape that covers the components in the packaged reel ensures protection against Electro Static Discharge (ESD) preventing any damage to the entire contents of the reel. Available in roll lengths up to 500m.

<table>
<thead>
<tr>
<th><strong>PPI TYPE</strong></th>
<th><strong>PPI LM-860D</strong></th>
<th><strong>PPI LM-382B</strong></th>
<th><strong>PPI SP-2300C</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Material</strong></td>
<td>Metallised Polyester Film</td>
<td>Metallised Polyester Film</td>
<td>Polyester Film</td>
</tr>
<tr>
<td><strong>Total Thickness</strong></td>
<td>0.055mm</td>
<td>0.052mm</td>
<td>0.060mm</td>
</tr>
<tr>
<td><strong>Adhesive</strong></td>
<td>Acrylic</td>
<td>Rubber based</td>
<td>Acrylic</td>
</tr>
<tr>
<td><strong>Adhesion/Tape width</strong></td>
<td>30 - 80 cN</td>
<td>20 – 120 cN</td>
<td>30 – 80 cN</td>
</tr>
<tr>
<td><strong>Surface Resistivity</strong></td>
<td>$10^5$ – $10^{10}$ ohm/cm</td>
<td>$10^5$ – $10^{10}$ ohm/cm</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Grey Transparent</td>
<td>Green Transparent</td>
<td>Transparent Film Black Adhesive</td>
</tr>
<tr>
<td><strong>Availability</strong></td>
<td>All standard sizes</td>
<td>All standard sizes</td>
<td>Limited sizes available</td>
</tr>
</tbody>
</table>

**Evaluation for compatibility between cover tape and carrier reel is advised.**

**PPI LM-382B**

Pressure sensitive cover tape which has good adhesion to difficult-to-adhere-to blister pack materials manufactured from low surface energy plastics. Coated with a specially formulated rubber/resin based adhesive, LM-382B gives added security and protection when packaging heavy or large components into the blister pack.

**PPI SP-2300C**

This is a non-metallised polyester based cover tape which is specifically used for packaging plastic components and devices that do not require any level of ESD protection. This product is only available in roll widths of 25.5mm upward and unlike our standard cover tape products is based on a single layer polyester film.

*As with all cover tape products, PPI can offer our customers technical support and assistance in determining compatibility between cover tape and specific carrier reels.*
ANTI-STATIC TAPES

Generation of static in the proximity of static sensitive devices can have a damaging effect on such devices. As a result of this anti-static tapes which do not generate ESD during roll unwind or application to the surface to be bonded or sealed are used in these environs. Applications include masking during conformal coating, reflow solder processes and sealing of PCB’s and components into anti-static bags.

- **PPI RD-042D**
  Polyimide based anti-static PCB high temperature masking tape for masking gold contacts.

- **PPI SP-249**
  Polyester based anti-static tape which can be used for masking during conformal coating processes or for closing anti-static bags.

- **PPI RD-512D**
  Translucent polyester based anti static tape used for similar applications as SP-249.

ELECTRICALLY CONDUCTIVE TRANSFER ADHESIVE

**PPI RD-073D**
Electrically conductive acrylic transfer adhesive that can be used to bond metal connectors or flat ribbon cables to circuit board contacts. PPI RD-073D is electrically conductive through its thickness (Z-axis) ensuring a continuous electrical pathway through the adhesive bond. RD-073D is supplied on a silicone release paper.

<table>
<thead>
<tr>
<th>PPI TYPE</th>
<th>RD-042D</th>
<th>SP-249</th>
<th>RD-512D</th>
<th>RD-073D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Material</td>
<td>Special Polyimide Film</td>
<td>Polyester Film</td>
<td>Polyester Film</td>
<td>Silicone Release Paper</td>
</tr>
<tr>
<td>Total Thickness</td>
<td>0.060mm</td>
<td>0.055mm</td>
<td>0.055mm</td>
<td>0.050mm</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Silicone</td>
<td>Acrylic</td>
<td>Acrylic</td>
<td>Electrically Conductive Acrylic</td>
</tr>
<tr>
<td>Adhesive Strength</td>
<td>1.0 N/cm</td>
<td>3.0 N/cm</td>
<td>3.0 N/cm</td>
<td>5.5 N/cm</td>
</tr>
<tr>
<td>Temperature Resistance</td>
<td>Short Term Up to 300°C</td>
<td>Short Term Up to 180°C</td>
<td>Short Term Up to 180°C</td>
<td>Short Term Up to 180°C</td>
</tr>
<tr>
<td>Colour</td>
<td>Brown Opaque</td>
<td>Grey</td>
<td>Translucent</td>
<td>Transparent</td>
</tr>
</tbody>
</table>

PPI DELIVERY SPECIFICATION

Standard Widths: 6, 9, 12, 15, 19, 25, 30, 38, 50, 60, 75, 100 mm. ¼” to 4”
Special and intermediates widths can be supplied from 1.0 mm upwards in steps of 0.5 mm depending on PPI type.

Core: 3” Cardboard or Plastic.

All technical data are based on average values.
Test methods are based on international standards e.g. VDE, EN, BSS, IEC, ASTM, UL, MIL, AFERA and CEN.
PPI Self-adhesive tapes are available in printed and die-cut forms, details on request.
Special tapes can be produced to customer’s specifications.
Our group of companies also offers you:

**PPI Adhesive Products Ltd.**

**PPI Self-adhesive tapes**
- For the electrical and electronic industries
- For the audio/video industries (splicing tapes, cleaning tapes, etc.)
- For use in printed circuit board assembly
- For shielding and winding transformer applications
- For a wide range of industrial and speciality applications (floor covering manufacture, masking tapes, etc.)

**Technical Adhesive Products Ltd. (T.A.P.)**

Producer of precision die-cut adhesive components for electrical, electronic and general industrial applications. T.A.P. can offer experienced technical know how on all aspects of product die-cutting and design.

**Waterford Research & Development Ltd.**

Continuously develops self-adhesive products for our own group and for our interested customers. R&D develops new production techniques and market know-how on all aspects of adhesive products.

**Valentia Industries.**

Producer of single and double-sided siliconised polyester films in a range of thicknesses from 0.012mm to 0.190mm. Available from 6mm to 1350mm width. Customised release levels a specialty.

**Important Note To Purchasers**

All statements, technical data and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness is not guaranteed, and the following is made in lieu of all warranties, express or implied.

Seller’s and manufacturer’s only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.

No statement or recommendation not contained herein shall have any force or effect unless embodied in a written agreement signed by authorised officers of seller and manufacturer.
PPI SALES COMPANIES WORLDWIDE

PPI Adhesive Products Limited
Waterford Industrial Park
Cork Road
Waterford
Ireland
Tel: +353 (0) 51 590400
Fax: +353 (0) 51 377687
Email: info@ppi.ie

PPI Adhesive Products GmbH
Postfach 1224
51780 Lindlar
Germany
Tel: +49 (0) 2266 6137
Fax: +49 (0) 2266 7795
Email: info@ppi-germany.de

PPI Adhesive Products (HK) Ltd
RM 1205, Kerry Center,
No. 2008 Ren Min Rd. S., Luohu Dist.
Shenzhen, Guangdong,
China, 518001
Tel: +86 755 25161140
Fax: +86 755 25161369
Email: info@ppi-china.cn

PPI Adhesive Products (Korea) Ltd
Room #306 Kumku Building
1718-4 Secho-Dong
Seocho-Ku
Seoul 137-070
Korea
Tel: +82 (0) 2 5365198
Fax: +82 (0) 2 5363490
Email: ppikorea@unitel.co.kr

PPI Adhesive Products (C.E.) s.r.o.
Dolna 62
Banska Bystrica
Slovakia
Tel: +421 48 470 0551
Fax: +421 48 415 3363
Email: office@ppi.sk

PPI Adhesive Products Pty. Ltd.
P.O. Box 3127
Rivonia 2128
South Africa
Tel: +0027 11 8072744 / 5348
Fax: +0027 11 8038179
Email: ppi@mweb.co.za

PPI Adhesive Products AG
Othmarsingerstrasse 29
5600 Lenzburg
Switzerland
Tel: +41 (0) 62-888 8030
Fax: +41 (0) 62-888 8040

United Kingdom
David Butcher
21 Foredrift Close
Southcrest, Redditch
Worcestershire B98 7NP
England
Tel/Fax: +44 (0) 1527 547232
Mobile: +44 (0) 7779 084696
Email: da.butcher@btinternet.com

Neil Priest
60 County Drive, Tamworth
Staffordshire B78 3XF
England
Tel/Fax: +44 (0) 1827 54354
Mobile: +44 (0) 7967 663345
Email: neil.priest@btinternet.com

Technical Adhesive Products Trading Co. FZE
P.O. Box: 41978 Hamriyah Free Zone
Sharjah
United Arab Emirates
Tel.: +971 5263101
Fax: +971 5263102
Email: tape@emirates.net.ae

PPI Adhesive Products (F.E.) PTE Ltd
629 Aljunied Road #03-11
Cititech Industrial Building
Singapore 389838
Republic of Singapore
Tel: +65 6746 3177
Fax: +65 6745 1815
Email: ppife@ppi.com.sg

PPI Adhesive Products Corp.
1990 Sproul Road
Broomall, PA 19008
USA
Tel: +1 610 353 7090
Fax: +1 610 353 7566
Email: ppitapes@aol.com