

PORON® Urethane Foams

General Adhesives Applications Guide

Rogers offer the following guidelines when combining PORON® Urethanes with adhesive:

- Apply adhesive to either surface of PORON and determine which provides the desired level of adhesion.
- Bonding results may differ when the adhesive is applied to buffed, unprinted, or otherwise treated PORON urethane surfaces.
- Minimize stretch and pressure to prevent material stress.
- Surface energy ranges from high to low. As a rule of thumb, the higher the surface energy, the greater the strength of adhesion.
- For further technical information about a specific adhesive, please contact the manufacturer directly to help determine which adhesive will be most suitable for your application.

General Adhesion

| COMPANY | ADHESIVE | PSA TYPE | TO BOND TO | APPLICATIONS |
|--------------------------|----------------|---|----------------------------|--|
| Covalence Adhesives | 6KM6 & 8 | Heat Sealable Rubber Double-Coated Tape | Foams | Heat seal applications, excellent aging characteristics |
| Covalence Adhesives | 1173B | Acrylic Double-Coated Tape | Foams | Excellent Anchorage to PE, rubber sponge, and other foams |
| Covalence Adhesives | 3000-3 & -5 | Acrylic Transfer Tape | Foams & HSE Plastics | High heat and humidity resistance |
| Covalence Adhesives | 2253A, B, & C | Acrylic Transfer Adhesives | Foams & HSE Plastics | High heat and humidity resistance |
| Covalence Adhesives | 2588C | Acrylic Double-Coated Tape | Urethane/Other Foams & PVC | High degree of plasticizer migration resistance |
| Covalence Adhesives | T1423 & T1453 | Acrylic Adhesive Transfer Tape | Most | High and Low Temperature resistance. High heat & humidity resistance |
| Dielectric Polymers, Inc | Neltape 140A89 | Unsupported Transfer Film | Most | General Use |
| FLEXcon | V-478 | Acrylic Adhesive Transfer Tape | Powder Coated | General Use |
| FLEXcon | V-778 | Acrylic Adhesive Transfer Tape | TPO Materials | General Use |
| FLEXcon | A-326 | Acrylic Adhesive Transfer Tape | Metals, HSE, LSE | General Use |
| Loctite | PRISM 411 | Cyanoacrylate | Most | General use |

High Surface Energy

| COMPANY | ADHESIVE | PSA TYPE | TO BOND TO | APPLICATIONS |
|----------------|------------------------------|--|-------------------------|--|
| 3M | 100 VHB | Acrylic Adhesive Transfer Tape | HSE | High shear strength, high temperature resistance |
| 3M | 100 High Temp | Acrylic Adhesive Transfer Tape | HSE | High temperature, low outgassing |
| 3M | 200, 200 MP High Performance | Acrylic Adhesive Transfer Tape | HSE | Medium / high temperature resistance |
| 3M | 220 | Acrylic Adhesive Transfer Tape | HSE | Economical acrylic |
| 3M | 300MP High Strength | Acrylic Adhesive Transfer Tape | HSE | Low fogging for automotive interiors |
| 3M | 9456 | Acrylic Double Coated Tape | HSE | Tissue supported for better conformability |
| Adchem | 256M | Acrylic Double Coated PET FILM | HSE | UV resistant, excellent performance in extreme temperatures |
| Adchem | 747, 730-60# | Acrylic Transfer Tape | HSE | Adheres well to many types of foam |
| Avery Dennison | HP Family | High Temperature High Shear Acrylic | Metals / HSE / Plastics | Automotive Exterior / Emblem Mounting Membrane Switch & Name Plates |
| MACtac | IB-2100 series | Acrylic-Based Double Coated Tape | HSE | PET carrier, resists some plasticizers |

Medium Surface Energy

| COMPANY | ADHESIVE | PSA TYPE | TO BOND TO | APPLICATIONS |
|----------------|----------------|-----------------------|-------------------------|----------------------------------|
| Avery Dennison | UP Family | Standard Acrylic | Metals / MSE / Plastics | Gasketing, Plasticizer Resistant |
| Avery Dennison | ECO Family | Solvent Free Acrylic | Metals / MSE / Plastics | Gaskets / Automotive Interior |
| MACtac | IF-2012 series | Acrylic Transfer Tape | MSE | Bonds plastic to metal or trim |

Low Surface Energy

| COMPANY | ADHESIVE | PSA TYPE | TO BOND TO | APPLICATIONS |
|----------------|--------------------------------|---|------------|---|
| Adchem | 7332 Series (12pt board liner) | Acrylic Transfer Tape | LSE | Bonds well to ether, ester, and low perm urethane foams |
| Avery Dennison | SR Family | Solvent Rubber | LSE | General Purpose Gasketing |
| Avery Dennison | MA Family | Modified Acrylic | LSE | Thin layer / Gasketing / High Precision Die Cut |
| Avery Dennison | LA Family | Modified Acrylic | LSE | Gasketing / Component Mount Mobile Electronics |
| 3M | 300 LSE High Strength | Acrylic Double Coated / Adhesive Transfer Tapes | HSE/LSE | Adheres to LSE surfaces |
| MACtac | IB-1101 | Rubber-Based Double Coated Tape | HSE/LSE | Adheres to LSE surfaces |

Special Adhesion Types

| COMPANY | ADHESIVE | PSA TYPE | TO BOND TO | APPLICATIONS |
|------------------------|-------------------|---|-------------------|--|
| 3M | 9415 PC | Acrylic w/ PET carrier | Repositionable | Repositioning |
| Adchem | 5000M | Rubber-Based Double Coated PET Film | Porous / Textured | Adheres well to porous and textured surfaces |
| Lohmann | Lohmamont MP6001B | Acrylic Adhesive on Polyester backing | Removable | Removable Adhesive Cover Liner |
| Polymask, a 3M company | 2A12C | Acrylic Adhesive on Polyethylene backing | Removable | Removable Adhesive Cover Liner |
| Polymask, a 3M company | 2A25C | Acrylic Adhesive on multi-polymer backing | Removable | Removable Adhesive Cover Liner |

HSE – High Surface Energy substrates
LSE – Low Surface Energy substrates

MSE – Medium Surface Energy substrates
PET – Polyester

Company Contact Information:

| COMPANY | WEBSITE | TELEPHONE NUMBER | CONTACT |
|---------------------------|--|------------------------|-------------------------------------|
| 3M | www.3m.com | 800-362-3550 | Customer Service Center |
| Adchem | www.adchem.com | 631-727-6000 | Customer Service Center |
| Avery Dennison | www.steu.averydennison.com | + 32 (0) 14 40 87 54 | Nancy Janssens |
| Covalence Adhesives | www.covcorp.com | 800-248-7659 x1672 | Elizabeth Curran |
| Dielectric Polymers, Inc. | www.dipoly.com | 800-628-9007 | Customer Service Representative |
| FLEXcon | www.flexcon.com | 508-885-8440 | Performance Product Business Team |
| Loctite Corp. | www.loctite.com | 800-LOCTITE (562-8483) | Customer Service Center |
| Lohmann | www.lohmann-tapes.com | 859-334-4900 | Linda Kourkounakis |
| MACTac | www.mactac.com | 800-321-0011 | Technical Products Customer Service |
| PolyMask, a 3M company | www.3m.com | 800-241-2031 | Customer Service Representative |

For further technical information regarding adhesives applications or processing issues for PORON urethane materials please contact:

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|--------------------|------------------------|-----------------|
| Rogers Corporation | 860-928-3622 Ext. 8835 | Fred Seidel |
| Rogers Corporation | 860-928-3622 Ext. 8918 | Jennifer Shukis |

The information contained in this Applications guide is intended to assist you in designing with Rogers' High Performance Foam Materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results shown on the Applications Guide will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application.

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