

Material Specification: Adhesives

2.0 mil 200MP Hi-Performance Acrylic Adhesive

Materials:

2.0 mil 200MP Hi-Performance Acrylic Adhesive

Service Temperature Range:

Minimum Temperature -40 F (-40 C) Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

Bond strength increases as a function of time and temperature, immersion in water has no appreciable effect on bond strength, initially repositionable, when properly applied it is not adversely affected by outdoor exposure and high humidity has minimal effect on adhesive performance, when properly applied it holds securely after exposure to numerous chemicals including gasoline, oil, sodium chloride solution, mild acids and alkalis, excellent die-cut-ability, ideal for relatively smooth surfaces, moisture stable liner resists curling or wrinkling in high humidity.

- Bonding of nameplates and decorative trim to metal and high surface energy plastics in automotive, appliance and electronic markets as well as plastic nameplates used in the aerospace, instrumentation and medical markets.
- Lamination to sub-surface printed polycarbonate or polyester graphic overlay materials used in assembly of membrane switches, including spacers for circuit separation graphic overlay for switch display and bonding the switch to the application surface.
- Used for lamination of wood veneers and plastic laminated to cabinetry and furniture. Hi-Performance adhesive initially is repositionable, then builds to high bond strength. Exceptional environmental resistance and enhanced bond strength that is resistant to edge lifting and slippage.
- Superior adhesive smoothness for improved clarity.
- Ideal for application to a relatively smooth surface.





5.0 mil 200MP Hi-Performance Acrylic Adhesive

Materials:

5.0 mil 200MP Hi-Performance Acrylic Adhesive

Service Temperature Range:

Minimum Temperature -40 F (-40 C)

Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

Bond strength increases as a function of time and temperature, very high initial adhesion, excellent diecut-ability, initially repositionable, ideal for rough or textured surfaces, when properly applied it is not adversely affected by outdoor exposure and high humidity has minimal effect on adhesive performance, immersion in water has no appreciable effect on bond strength, when properly applied it holds securely after exposure to numerous chemicals including gasoline, oil, sodium chloride solution, mild acids and alkalis, moisture stable liner resists curling or wrinkling in high humidity.

- Bonding of nameplates and decorative trim to metal and high surface energy plastics in automotive, appliance and electronic markets as well as plastic nameplates used in the aerospace, instrumentation and medical markets. Lamination to sub-surface printed polycarbonate or polyester graphic overlay materials used in assembly of membrane switches, including spacers for circuit separation graphic overlay for switch display and bonding the switch to the application surface.
- Exceptional environmental resistance and enhanced bond strength that is resistant to edge lifting and slippage.
- Superior adhesive smoothness for improved clarity.
- Used for lamination of wood veneers and plastic laminated to cabinetry and furniture.
- Hi-Performance adhesive initially is repositionable and then builds to high bond strength.
- Ideal for application to a variety of rough or textured surfaces.





Membrane Spacer

Materials:

Membrane Spacer (2-1-2), 5.0 mil overall consisting of: 2.0 mil Adhesive, 1.0 mil Polyester Membrane, 2.0 mil Adhesive

Service Temperature Range:

Minimum Temperature -40 F (-40 C)

Ideal temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

Double lined for selective die cutting, withstands repeated stresses of switch actuation, excellent shear strength, moisture stable liner, liner is silicone coated on adhesive side only, allowing for ease of stacking parts.

Usage:

Designed to separate circuitry until actuation. Bond strength may be improved with firm
application pressure and moderate heat, which help adhesive flow out and develop better
contact with bonding surface. Attachment of graphic overlays to membrane switches or
keypads. Attachment of membrane switches to product housing.





2.0 mil #300MP High-Strength Acrylic

Materials:

2.0 mil #300MP High-Strength Acrylic

Service Temperature Range:

Ideal application temperature range: Above 60 F (15.6 C)

Advantages:

Double lined for selective die cutting, bond strength increases as a function of time and temperature, smooth adhesive for high quality appearance on thin graphic overlays, High bond adhesive for application to plastic surfaces, including low surface energy plastics, excellent resistance to gasoline, oil, sodium chloride solution and mild acids and alkalis, immersion in water has no appreciable effect on bonding strength.

- Attachment of overlays, which require window areas void of adhesive. Proper preparation of application surfaces is essential to assure high quality, long lasting bond-call for details.
- Bond strength can be improved with applying firm pressure.





Double Linered Laminating Adhesive

Materials:

Double Linered Laminating Adhesive 200 Hi-Performance Acrylic Adhesive

Service Temperature Range:

Minimum Temperature -40 F (-40 C) Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

Double lined for selective die cutting, smooth adhesive for high quality appearance on thin graphic overlays, high cohesive strength to withstand repeated stresses from switch activation, high temperature, humidity, and chemical resistance, resistant to oxidation and ozone when exposed to air or sunlight (U.V.)

- Attachment of graphic overlay to membrane switches or keypads.
- Attachment of membrane switches to product housing. Lamination to polyester for membrane spacers. Bond strength increases as a function of time and temperature.
- Bond strength is dependent upon the amount of adhesive-to surface contact. Firm application pressure develops better adhesive contact and improves bond strength.
- Solvent resistance is excellent when properly applied to impervious materials. Adhesive resists softening through edge contact with mild acids, alkalis, oil, gasoline, kerosene, JP-4 fuel and many other solvents. Not recommended for total immersion.





3.5 mil 3M 300LSE High-strength Acrylic Adhesive

Materials:

3.5mil 3M 300LSE High-strength Acrylic Adhesive

Service Temperature Range:

Minimum Temperature -40 F (-40 C) Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

Double lined for selective die-cutting, high bond strength to most surfaces, excellent bond to low surface energy plastics including polypropylene and powder coatings, excellent adhesion to lightly oiled surfaces typical of machine parts, extremely smooth adhesive is excellent for graphics appearance, bond strength increases as a function of time and temperature, very high initial adhesion, high humidity has minimal effect on adhesive performance, when properly applied it is not adversely affected by U.V. exposure, immersion in water has not appreciable effect on bond strength, when properly applied the adhesive holds securely after exposure to numerous chemicals including oil, mild acids and alkalis.

- Application to surfaces such as plastic, where very high bond strength is required as well as
 plastic nameplates or graphic overlays for use on low surface energy plastics. Waste removed
 nameplates on a common sheet for ease of application.
- Overlays with selectively removed adhesives. Attaching decals to lightly oiled surfaces typical of machine parts. For use on smooth or rough surfaces.
- Bond strength can be improved with firm application pressure and moderate heat, from 70 F to 100 F (21C to 38 C).





3.5 mil High-strength Acrylic Adhesive 300LSE

Materials:

3.5mil High-strength Acrylic Adhesive 300LSE

Service Temperature Range:

Minimum Temperature -40 F (-40 C)

Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

High bond strength to most surfaces with very high initial adhesion, excellent bond to low surface energy plastics including polypropylene and powder coatings, excellent adhesion to lightly oiled surfaces typical of machine parts, extremely smooth adhesive is excellent for graphic appearance, high humidity has minimal effect on adhesive performance, when properly applied it is not adversely affected by UV exposure, immersion in water has no appreciable effect on bonding strength, when properly applied it holds securely after exposure to numerous chemicals including oil, mild acids and alkalis, can be used on smooth, rough and textured surfaces.

- Attaching membrane switch assemblies to powder coated surfaces as well as plastic nameplates or graphic overlays for use on low surface energy plastics.
- Waste removed nameplates on a common sheet for ease of application.
- Graphic overlays with end tabs for easy liner removals. Graphic application to surfaces such as wood, fabric, plastic, where very high bond strength is required.
- Attaching identification decals to lightly oily surfaces typical of machine parts.
- Low temperature holding is generally satisfactory.
- Bond strength increase as a function of time and temperature.
- Bond strength can be improved with firm application pressure and moderate heat.





5.0 mil High-strength Acrylic Adhesive 300LSE

Materials:

5.0mil High-strength Acrylic Adhesive 300LSE

Service Temperature Range:

Minimum Temperature -40 F (-40 C)

Ideal application temperature range: 70 F to 100 F (21 C to 38 C)

Advantages:

High bond strength to most surfaces with very high initial adhesion, can be used on smooth, rough and textured surfaces, excellent bond to low surface energy plastics including polypropylene and powder coatings, excellent adhesion to lightly oiled surfaces typical of machine parts, extremely smooth adhesive is excellent for graphic appearance, high humidity has minimal effect on adhesive performance, when properly applied it is not adversely affected by UV exposure, immersion in water has no appreciable effect on bonding strength, when properly applied it holds securely after exposure to numerous chemicals including oil, mild acids and alkalis.

- Attaching membrane switch assemblies to powder coated surfaces as well as plastic nameplates or graphic overlays for use on low surface energy plastics.
- Waste removed nameplates on a common sheet for ease of application. Graphic overlays with end tabs for easy liner removals.
- Graphic application to surfaces such as wood, fabric, plastic, where very high bond strength is required. Attaching identification material to lightly oily surfaces typical of machine parts. Low temperature holding is generally satisfactory.
- Bond strength increase as a function of time and temperature.
- Bond strength can be improved with firm application pressure and moderate heat.





Adhesive Transfer Tapes With 220 Adhesive

Materials:

Adhesive Transfer Tapes With 220 Adhesive

Service Temperature Range:

Minimum Temperature -31 F (-35 C) Ideal application temperature range: 70F to 100 F (21 C to 38 C) not recommended for application temperatures below 50 F (10 C)

Advantages:

Liner is more resistant to humidity curl and wrinkling than standard liners, resistant to occasional splashes of organic materials including MEK, automotive oil, weak acid and base solutions and gasoline, bonds to metals, painted metals and high surface energy plastics, resistant to humidity and intermittent water exposure.

Disadvantages:

Not recommend for low energy plastics including polypropylene, polyethylene, and powder coated paints.

- Acceptable when bonding a thin, smooth, flexible material to a smooth surface. Used in automotive, appliance and electronic industries applications.
- Used for nameplates and decorative trim being applied to metal, painted metals and high surface energy plastics. Lamination to sub-surface printed polycarbonate or polyester graphic overlays.

