



# High Performance Double Coated Tapes with Adhesive 375

9086 • 9087 • 9088 • 9088FL

## Technical Data

March, 2007

**Product Description** 3M™ Double Coated Tapes with 3M™ Adhesive 375 provides a high level of adhesive peel and shear performance. The adhesive system used on these products provides good adhesion to both high and low surface energy substrates. The excellent initial tack ensures that a bond of good integrity is achieved soon after application.

## Construction

| Product                       | Adhesive         | Total Tape Thickness w/o Liner | Tape Color  | Carrier            | Liner Color, Type, Print                  | Liner Caliper      | Tape Color  |
|-------------------------------|------------------|--------------------------------|-------------|--------------------|-------------------------------------------|--------------------|-------------|
| 3M™ Double Coated Tape 9086   | Modified Acrylic | 7.5 mils (0.19 mm)             | Translucent | Tissue –           | White Paper (Glassine) with Black 3M Logo | 3.0 mils (0.07 mm) | Translucent |
| 3M™ Double Coated Tape 9087   | Modified Acrylic | 10.2 mils (0.26 mm)            | White       | PVC 1.5 mils       | White Paper (Glassine) with Green 3M Logo | 3.0 mils (0.07 mm) | White       |
| 3M™ Double Coated Tape 9088   | Modified Acrylic | 8.3 mils (0.21 mm)             | Clear       | Polyester 0.5 mils | White Paper (Glassine) with Red 3M Logo   | 3.0 mils (0.07 mm) | Clear       |
| 3M™ Double Coated Tape 9088FL | Modified Acrylic | 8.3 mils (0.21 mm)             | Clear       | Polyester 0.5 mils | Red Polypropylene Film, No Print          | 3.1 mils (0.08 mm) | Clear       |

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## Typical Physical Properties and Performance Characteristics

**Note:** The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

|                                                                                             |                            | 3M™ Double Coated Tapes |                         |                         |                           |
|---------------------------------------------------------------------------------------------|----------------------------|-------------------------|-------------------------|-------------------------|---------------------------|
| Typical Adhesion                                                                            |                            | 9086<br>Oz/in (N/10 mm) | 9087<br>Oz/in (N/10 mm) | 9088<br>Oz/in (N/10 mm) | 9088FL<br>Oz/in (N/10 mm) |
| 180 Degree Peel<br>ASTM D3330<br>Modified, 2-mil<br>Aluminum Backing<br>(Faceside Adhesion) | Stainless Steel            | 146<br>(16)             | 142<br>(16)             | 137<br>(15)             | 137<br>(15)               |
|                                                                                             | Polycarbonate              | 162<br>(18)             | 146<br>(16)             | 155<br>(17)             | 155<br>(17)               |
|                                                                                             | Glass                      | 146<br>(16)             | 164<br>(18)             | 128<br>(14)             | 128<br>(14)               |
|                                                                                             | ABS                        | 137<br>(15)             | 146<br>(16)             | 119<br>(13)             | 119<br>(13)               |
|                                                                                             | HDPE                       | 68<br>(7)               | 82<br>(9)               | 64<br>(7)               | 64<br>(7)                 |
|                                                                                             | High Pressure Laminate     | 119<br>(13)             | 119<br>(13)             | 101<br>(11)             | 101<br>(11)               |
| Typical Sheer Performance                                                                   | Temperature Weight         | Minutes to Failure      | Minutes to Failure      | Minutes to Failure      | Minutes to Failure        |
| ASTM D3654<br>modified (1-inch <sup>2</sup><br>sample size)                                 | 72°F (22°C)<br>1000g       | 10,000                  | 10,000                  | 10,000                  | 10,000                    |
|                                                                                             | 158°F (70°C)<br>500g       | 10,000                  | 10,000                  | 10,000                  | 10,000                    |
|                                                                                             | 200°F (93°C)<br>500g       | —                       | —                       | 10,000                  | 10,000                    |
| Temperature Performance                                                                     | Continuous (Days/Weeks)    | 185°F (85°C)            | 158°F (70°C)            | 200°F (93°C)            | 200°F (93°C)              |
|                                                                                             | Short Term (Hours/Minutes) | 248°F (120°C)           | 185°F (85°C)            | 300°F (150°C)           | 300°F (150°C)             |
| Solvent Resistance                                                                          |                            | Good                    | Good                    | Good                    | Good                      |
| UV Resistance                                                                               |                            | Excellent               | Excellent               | Excellent               | Excellent                 |
| Plasticizer Resistance <sup>(1)</sup>                                                       |                            | Good                    | Good                    | Good                    | Good                      |

<sup>(1)</sup>All products show good resistance to plasticizer migration. However due to the wide range of plasticizers available we strongly suggest that an evaluation is conducted prior to use to ensure compatibility. Sampling substrates with tape applied for 10 days at 158°F (70°C) will usually accelerate any potential problems. Plasticizers are typically found in materials such as polyvinyl chloride and some rubber products.

## Application Ideas

- POP Displays
- Metal Fabrication
- Sports Equipment
- Indoor/Outdoor Signs
- Blind Manufacturers
- Furniture Trim
- Plastic Extrusions
- Blister Packs and Packaging
- Badge and Nameplates
- Fabric and Leather Stitching
- Print Finishing
- Splicing

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|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage</b>                     | Store in original carton at 70°F (21°C) and 50% relative humidity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Shelf Life</b>                  | If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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ISO 9001:2000

This product was manufactured under a quality system registered to ISO 9001:2000 standards.



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