



# Gloss Clear Polyester Overlaminating Film 7731FL

## Product Data Sheet

Updated : July 2000

Supersedes : July 1995

### Description :

- Premium overlaminate performance for extreme environmental conditions.
- Superior abrasion, humidity and solvent resistance.
- exposure resistant for extended periods of time.
- Premium clarity films will not impart haze on underlying graphics.
- "Hi-Tack" Acrylic Adhesive offers premium adhesive performance to a wide variety of surfaces.
- Specifically designed for high-speed, continuous-web rotary press lamination.
- High-bond strength resists edge lifting.
- Film liner offers superior graphic appearance for metalised or darker colours.
- 3M brand Overlaminating Films are Underwriters' Laboratories Recognised (File MH11410).

### Physical Properties

Not for specification purposes  
(Calipers are nominal values)

|                   |  |  |  |  |
|-------------------|--|--|--|--|
| <b>Facestock</b>  | 51 microns (2.0 thou) Clear Polyester  |  |  |  |
| <b>Adhesive</b>   | 20 microns (0.8 thou) #400 Hi-Tack Acrylic   |  |  |  |
| <b>Liner</b>      | 38 microns (1.5 thou) Clear Polyester  |  |  |  |
| <b>Shelf Life</b> | 12 months from receipt of material when properly stored at 22°C & 50 % Relative Humidity |  |  |  |

### Physical Properties

Not for specification purposes

| <b>Adhesion</b><br>180° Peel (ASTM D3330) |                       |         |  |         |
|---|-----------------------|---------|--|---------|
| Surface                                   | Initial 10 min. dwell |         | Conditioned for 3 days at Room Temperature |         |
|   | N/10mm                | Oz./In. | N/10mm                                     | Oz./In. |
| Stainless Steel                           | 4.9                   | 45      | 6.5  | 60      |
| Polyester                                 | 5.2                   | 48      | 5.5  | 51      |

| 180° Liner Release | Rate of Removal | Gram / 25mm Width |
|--------------------|-----------------|-------------------|
|                    | 2.3 m / min     | 11                |
|                    | 7.6 m / min     | 12                |

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## Environmental Performance

The properties defined are based on four-hour immersions at room temperature, unless otherwise noted. Samples were applied to stainless steel 24 hours prior to immersions and were evaluated one hour after removal.

### Chemical Resistance

|                             |                |
|-----------------------------|----------------|
| Chemical                    | Appearance     |
| Isopropyl Alcohol           | No Change      |
| Detergent                   | No Change      |
| Engine Oil at 121°C (250°F) | No Change      |
| Water for 48 hours          | Slight fogging |

### Temperature Resistance

|                            |                    |
|----------------------------|--------------------|
| 149°C (300°F) for 24 hours | Slightly yellowing |
| -40°C (40°F) for 24 hours  | No Change noted    |

### Humidity Resistance

|  |           |
|--|-----------|
| 24 hours at 38°C (100°F) at 100% relative humidity | No Change |
|--|-----------|

## Applications

Protective overlaminate for label and nameplate graphics can be used on appliances, industrial equipment, tools etc.

Graphics requiring a high-gloss or matt appearance.

## Processing

### Printing:

Facestock are not print treated. Liner backside has anti-block coating which makes it difficult to achieve good ink anchorage when printing on back of liner. Call Customer Service for recommendations.

### Die Cutting:

Rotary or flat-bed after lamination.

## Special Considerations

For maximum bond strength, surface should be thoroughly cleaned and dried. A typical cleaning solvent is heptane or isopropyl alcohol.

CAUTION: Follow manufacturer's instructions when using solvents.

For best bonding conditions, application surface should be at room temperature or slightly higher. Low temperature surfaces, below 10°C (50°F), cause the adhesive to become firm and will not allow the adhesive to flow and develop intimate contact with the substrate.

Higher initial bonds are achieved through increased rub down pressure. Use maximum laminating pressure for best results.

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes.

Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.

This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.



## Tapes & Adhesives Group

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