

# 92200 Polyester Label Material

### **Product Data Sheet**

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### **Product Description**

3M<sup>TM</sup> 92200 is designed for application onto textured, grained and structured very low surface energy plastics such as Polypropylene (PP), low density Polyethylene (LDPE), mineral filled and fibre reinforced PP and Polyamide (PA) composites. These types of plastic materials are used increasingly in the automotive industry in the engine compartment and for interior and exterior applications.

92200 label stock is designed for easy processing using rotary die cutting. The polyester facestock is top coated for thermal transfer printing and provides improved ink anchorage for traditional forms of press printing such as flexography, hot stamp, letterpress and screen printing.

## **Short Description / Dispatch Labelling**

3M 92200 TT2 GW PET50-SE100/65-65DWG

### **Physical Properties**

Not for specification purposes (Calipers are nominal values)

Facestock	50 micron gloss radiant white polyester
Adhesive	65 g/m <sup>2</sup> # SE100
Liner	56 micron, 62 g/m <sup>2</sup> white densified double-sided glassine

### **Key Features**

- The new SE100 adhesive gives high adhesion to very low surface energy surfaces
- Ultra-high 65 g/m<sup>2</sup> adhesive coat weight for excellent adhesion to rough and textured surfaces.
- Densified double-side glassine liner assures consistent die cutting. The double-side liner improves ease of dispensing and reduces issues related to oozing.
- Facestock is topcoated for thermal transfer printing. Resin ribbons are recommended for optimum durability. The top coat also provides improved ink anchorage for traditional forms of press printing.

### **Application Ideas**

- Labelling of reinforced plastics and structured composites for automotive and industrial applications
- All Automotive plastic surfaces in interior or engine compartment
- Labels to be used on difficult to adhere to surfaces
- Warning, Instruction and service labels for durable goods

### **Performance Characteristics**

Not for specification purposes

Standard Test Conditions are 23°C and 50% Relative Humidity 90°Peel Adhesion tested using FINAT Test Procedure FTM 2 (300mm/min)

### Adhesion to various Substrates (72 hours at standard conditions)

Substrate	Mineral Filler	Surface Structure	90° Peel N/25mm
Stainless Steel		Smooth	37.8
Polyamide			
PA 6	None	Smooth	38.5
PA 6	MR30	Smooth	31.5
PA 6	MR30	Rz 50 μm	12.2
PA 6	MR30	Rz 300 µm	9.5
Polypropylene			
PP	None	Smooth	35.7
HCPP	None	Smooth	38.5
PP	MR20	Smooth	37.2
PP	MR20	Rz 50 μm	13.0
PP	MR20	Rz 300 µm	9.5
PP	TV20	Smooth	31.5
PP	TV20	Rz 40 µm	24.0
Other Polyolefins			
POM	None	Smooth	34.5
PP-EPDM	TD10	Smooth	40.0
LDPE	None	Smooth	40.5

### Adhesion 72 Hours at 70°C

Substrate	90° Peel N/25mm
Stainless Steel	37.0
ABS	22.8
Polypropylene	33.1

Liner Release tested using FINAT Test Procedures FTM 3 (180° removal of liner from face material at 300mm/min)

FTM 4 (180° removal of liner from face material at 10m/min)

Liner Release	Rate of Removal	Release Force	Units
FTM 3	300 mm per min	24.3	cN/50mm
FTM 4	10 m per min	9.0	cN/25mm

### Performance Characteristics Contd.

Temperature stability:	-40°C to +130°C (No visible change after 72 hours).	
Adhesive:	Modified synthetic elastomer, series SE100, suitable for difficult LSE substrates such as polypropylene and polyamides	
Minimum application temperature:	+15°C	

### **Processing**

### **Printing:**

Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. It is printable by all standard roll-processing methods including flexography, hot stamp, letterpress, and screen-printing.

### Die Cutting:

Rotary die cutting is recommended. Fanfolding of labels is not recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing. Flat bed die cutting is not recommended and must be evaluated before use.

#### Packaging:

Finished labels should be stored in plastic bags.

### **Special Considerations**

For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.

**NOTE:** When using solvents, read and follow the manufacturer's precautions and directions for use.

For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 5°C can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. For application of 92200 it is necessary to use uniform increased pressure in order to obtain good adhesion on structured surfaces. The use of a felt blade or roller increases the contact of the adhesive with the substrate.

### Storage

Store at standard room temperature conditions of 21°C and 50% relative humidity.

### **Shelf Life**

24 months from date of dispatch by 3M when stored in the original packaging at 21°C & 50 % relative humidity

### **Important Note**

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

#### Note

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

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