



# Screen Printable Adhesive SP-4533

## Product Data Sheet

 Updated : April 2004  
 Supersedes : July 2000

### Product Description

SP-4533 is a water-dispersed pressure sensitive adhesive, which has been specifically formulated to be screen printable. This product exhibits a good combination of peel, shear and environmental ageing properties.

### Physical Properties

Not for specification purposes

<b>Solids</b>	65 %
<b>Colour</b>	Milky White
<b>Carrier</b>	Water
<b>Specific Gravity</b>	1.05
<b>Viscosity</b>	28,000 - 40,000 CPS
<b>pH</b>	7.0
<b>Shelf Life</b>	Store in original container. Temperature not to exceed 40°C. Keep from freezing. Shelf life is 12 months when temperature is kept between 5-35°C.

### Features/Advantages

- **Screen Printable**
- **Print Complicated Patterns**
- **High Heat Resistance**
- **Low waste**
- **More Versatile Product Designs**
- **Higher Product Quality**

### Applications

- Cell Phones
- Graphic Applications
- Home Appliances
- Audio Equipment

April 2004

SP-4533

**Characteristics**  
Not for specification purposes

Peel Force 180° Peel test, 100 micron PET Film, conditioned 50°C/24 hours, 35 micron adhesive thickness.	
<b>Substrate</b>	N/10mm
<b>Stainless Steel</b>	11.2
<b>ABS</b>	5.1
<b>PVC</b>	9.3
<b>Polycarbonate</b>	9.3

Environmental Resistance 180° Peel test, PET 100 micron ABS, 35 micron adhesive thickness.	
<b>Condition</b>	N/10mm
<b>Initial (25°C)</b>	5.1
<b>80°C / 100 hours</b>	9.7
<b>60°C / 95% RH / 1000 hours</b>	5.8
<b>40°C / 1000 hours water immersion</b>	9.3

Heat Resistance PET 100 micron to Stainless Steel, 35 micron adhesive thickness.	
<b>Temperature</b>	N/10mm
<b>90°C</b>	3.9

Dead Load Test	
<b>Load</b>	<b>Temperature</b>
<b>1 kg</b>	77°C
<b>0.5 kg</b>	130°C

**Application**  
**Suggestions**

Use directly without dilution. Agitate well before using. Do not add additives such as defoamers. Keep container tightly capped during storage. Avoid returning used adhesive to container. Select the screen mesh based on required adhesive coating thickness and printing precision. Stainless steel, polyester and nylon wire in the range of #70 to #150 can be used for screen mesh materials. Waster resistant materials such as acrylics or diazos should be used for mesh masking materials

Date : April 2004  
Screen-Printable Adhesive  
SP-4533

---

**Precautionary  
Information**

Refer to product Label and Material Safety Data Sheet for Health & Safety Information before using this product.

3M is a trademark of the 3M Company.

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**

3M United Kingdom PLC  
3M Centre  
Cain Road,  
Bracknell, Berkshire,  
RG12 8HT

Product Information :  
Tel 0870 60 800 50  
Fax 0870 60 700 99

3M Ireland  
3M House, Adelphi Centre,  
Upper Georges Street,  
Dun Laoghaire, Co. Dublin,  
Ireland

© 3M United Kingdom PLC 2004

Customer Service :  
Tel (01) 280 3555  
Fax (01) 280 3509