



Screen-Printable Adhesive

SP7533

Technical Data

February, 2003

Product Description

3M™ Screen-Printable Adhesive SP7533 is a water-dispersed, pressure sensitive adhesive which has been formulated to be screen printable. This product exhibits a good combination of peel, shear and environmental aging properties.

Features/Advantages

Features

- Screen printable
- High solids
- Print complicated patterns
- Water-dispersed
- High heat resistance
- Compatible with metal and plastic

Advantages

- Low waste
- High coverage
- More versatile product designs
- Non-flammable in the wet state
- High product quality
- Broad range of applications

Application Ideas

- Membrane Switch Keypads
- Cell Phones
- Car Interior Trim
- Graphics Application
- Hand-Helds
- Home Appliances
- Touch Panels
- Audio Equipment
- Foam Padding

Typical Physical Properties

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

Solids:	65%
Color:	Milky White
Carrier:	Water
Specific Gravity:	1.05
Viscosity:	28,000-40,000 CPS
pH:	7.0

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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 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. Water resistant materials such as acrylics or diazos should be used for mesh masking materials.

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

Peel Force: 180 degree peel test; 4 mil (100 micron), PET film; conditioned 120°F (50°C) / 24 hrs; 1.4 mil (35 micron) adhesive thickness.

Substrate	lb/in	kgf/25 mm
Stainless Steel:	6.4	2.9
ABS:	2.9	1.3
PVC:	5.3	2.4
Polycarbonate:	2.9	1.3

Environmental Resistance: 180 degree peel test; PET 4 mil (100 microns) / ABS; 1.4 mil (35 micron) adhesive thickness.

Condition	lb/in	kgf/25 mm
Initial 75°F (25°C)	2.9	1.3
175°F (80°C) / 1000 hrs	5.5	2.5
140°F (60°C) / 95% Rh. / 1000 hrs	3.3	1.5

Heat Resistance: PET 4 mil (100 micron) / Stainless Steel; 1.4 mil (35 micron) adhesive thickness.

Temperature	lb/in	kgm/25 mm
195°F (90°C)	2.2	1.0

Dead Load Test

Load	Temperature
2.2 lb (1 kgf)	170°F (77°C)
1.1 lb (0.5 kgf)	> 266°F (130°C)

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Storage Store in original container. Temperature not to exceed 105°F (40°C). Keep from freezing.

Some liquid separation from the adhesive during storage is normal. This liquid should be remixed into the adhesive by low-shear, mechanical agitation. Mixing by hand is adequate for small volumes of adhesive.

Shelf Life Shelf life is 12 months from date of shipment when stored in original container and temperature is kept between 40-95°F (5-35°C).

Precautionary Information Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

For Additional Information To request additional product information or to arrange for sales assistance, call toll free 1-800-223-7427 or visit www.3m.com/converter. Address correspondence to: 3M Industrial Adhesives and Tapes Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55106. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



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