3M™ Very Low Outgassing Polyester Seal Tape 6692

Product Description

The 3M™ Very Low Outgassing Polyester Seal Tape 6692 is a 3.0 mil total thickness low outgassing, polyester backed, single coated sealing tape for Hard Disk Drive assembly and related electronics sealing applications. This 2 mil metalized polyester backing offers a glossy visual appearance along with the functional properties of low static, low diffusivity, and high tensile strength. The low outgassing acrylic adhesive offers excellent chemical performance, high shear strength, and a permanent yet reworkable level of adhesion to a variety of substrate materials. The adhesive has been further enhanced to eliminate measurable organic acid from the outgassing signature. 3M™ Non-Silicone Polyester Liner 5932 completes the construction.

Product Construction

Backing	Color	Adhesive	Liner
2 mil Metalized Polyester	Silver	Low Outgassing Acrylic	5932 Non-silicone

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.

		ASTM Test Method
Adhesion to Stainless Steel:		
(Initial, 15 min.)	18 oz./in.	D-3330, part F
(24 hrs. @ Room Temp.)	33 oz./in.	D-3330, part F
(24 hrs. @ 120°F)	52 oz./in.	D-3330, part F
(24 hrs. @ 150°F)	62 oz./in.	D-3330, part F
Adhesion to Aluminum:		
(Initial, 15 min.)	78 oz./in.	D-3330, part F
(24 hrs. @ Room Temp.)	79 oz./in.	D-3330, part F
(24 hrs. @ 120°F)	86 oz./in.	D-3330, part F
(24 hrs. @ 150°F)	89 oz./in.	D-3330, part F
Tape Thickness:	3.0 mils (0.076 mm)	D-3652
Adhesive Thickness:	1.0 mil (0.025 mm)	D-3652
Release Liner Thickness:	2.0 mils (0.051 mm)	D-3652
Tensile Strength:	52 lb./in. width (440 N/100 mm)	D-3759
Elongation:	120%	D-3759

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Typical Chemical Properties

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Outgassing:
Outgassing by Dynamic Headspace, 3 hr. @ 85°C, Quantify by GC-Mass Spec

		ASTM Test Method
Hydrocarbons	< 100 ng/cm²	D-4526[1]
Benzoic Acid	Not detected	D-4526[1]
Total Organic Acids	Not detected	D-4526[1]
Alkyl Acrylates / Esters	< 40 ng/cm²	D-4526[1]
Phenols & Alcohols	< 50 ng/cm²	D-4526[1]
Siloxanes	< 10 ng/cm²	D-4526[1]
Total Outgassing	Not detected	D-4526[1]

[1]Outgassing = Dynamic headspace analysis of volatile components collected during a 3 hr. @ 85°C heat cycle using a Hewlett-Packard Model 5890 Series II gas chromatograph coupled with a Hewlett-Packard 5989B Mass Spectrometer.

Extractable Ionics:
Water extractable ionics by IC, 1 hr. @ 85°C, Quantify by Ion Chromatography

Fluoride	Not detected
Chloride	< 15 ng/cm²
Nitrate	Not detected
Bromide	Not detected
Phosphate	Not detected
Sulfate	Not detected

General Information

- Storage and die cutting are preferred in controlled temperature and humidity environment. High humidity exposure can cause die cutting defects.
- Poor die cutting could lead to poor product quality.
- Weeds should be removed immediately.
- Rotary die cutting is recommended.
- Substrate should be smooth, clean, dry and oil-free to provide good wet-out and adequate adhesion.
- Adhesive should not be applied at temperatures < 50°F (10°C) [best if room temperature or higher].
- Custom sizes available.

Application Ideas

- Sealing of Hard Disk Clamshells.
- Sealing of other electronic devices or instrumentation requiring a low outgassing adhesive tape product.
- Other permanent applications requiring an exceptionally high chemical purity, single coated tape.

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Shelf Life

Product retains its performance for two years from date of manufacture when properly stored at 60-80°F (16-27°C) and 40-50% relative humidity condition.

Certification/Recognition

MSDS: 3M has not prepared a MSDS for this product which is not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the product should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the directions for use may affect its performance and present potential health and safety hazards.

TSCA: This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements.

RoHS: This product complies with the requirements of EU Directive 2002/95/EC and 2005/618/EC.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M Electronics Markets Materials Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Important Notice

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