

3M

Scotch-Seal™

Tamper Proof Sealant

1252

Technical Data

September, 2002

Features

- 3M™ Scotch-Seal™ Tamper Proof Sealant 1252 is a fast drying, anti-tamper sealer which is fire retardant.
- It can be applied over adjustable or removable parts to indicate changes in adjustment or other evidence of tampering by a break in the seal when the part is altered in position.
- Scotch-Seal 1252 has been effectively used in the Electronics Industry to protect settings and calibrations of electronic equipment against tampering, to seal electronic components between stages of assembly, to aid in the visual inspection of subassembly components, equipment and parts which are restricted to adjustment, alteration, or access by qualified personnel.
- Exposed surfaces of Scotch-Seal 1252 will accept ink from an inspector's approval stamp and can be marked as soon as 20 seconds after the sealer application.

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.

Viscosity (approx.):	500 - 2500 cps
Brookfield Viscometer:	RVF #6 sp. @ 4 rpm @ 77°F (26°C)
Solids (by wt):	61 - 73%
Base:	Nitrile
Color (wet and dry):	White
Net weight (approx.):	13.1 - 14.1 lbs.
Flash point:	20°F (-4°C)
Solvent:	Methyl ethyl ketone (MEK)

Handling/Application Information

Application: Scotch-Seal 1252 is a one-part, air drying compound suitable for hand extruding from a collapsible metal tube. Surfaces must be clean, dry and dust free.

Cleanup: Excess sealant may be removed from application equipment with a solvent such as 3M™ Scotch-Grip™ Solvent No. 3 or methyl ethyl ketone (MEK).*

***Note:** When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.

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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.

- **Drying Time:** A 1/8" layer of 3M™ Scotch-Seal Tamper Proof Sealant 1252 is tack-free in 20 seconds and suitable for stamping with ink.
- **Hardness:** After 24 hours @ 77°F (25°C), 50% R.H., the Scotch-Seal 1252 has a Shore A hardness of 97-99.
- **Friability:** Scotch-Seal 1252 is easily crumbled when the surface to which it is applied is flexed or twisted.
- **Flammability:** Dry film of the sealant is fire retardant and flames will extinguish themselves within 15 seconds.
- **Dielectric Strength:** 100 volts/mil, minimum, Fed. Standard #406, Method 4031.
- **Surface Resistivity:** 10¹⁰ ohms, minimum, Fed. Standard #406, Method 4041.
- **Volume Resistivity:** 10¹⁰ ohms-cm, minimum, Fed. Standard #406, Method 4041.
- **Heat Resistance:** Scotch-Seal 1252 dried for 24 hours @ 77°F (25°C) 50% R.H., withstands 200°F (93.3°C) for 72 hours without loss of adhesion or sagging.
- **Fluid Resistance:** Scotch-Seal 1252 cured 24 hours @ 77°F (25°C) 50% R.H. was immersed in the following fluids:

MIL-L-7808 Oil	Moderate softening; good adhesion
Aviation Gas (115/145)	Slight softening; good adhesion
3% Salt Water	No effect
Tap Water	No effect
JP-4 Fuel	Slight softening; good adhesion
- **Adhesion (Shear Strength)**

Average of 6	Alclad	Steel
	173 psi	164 psi
- **Overlap Shear:** 1" x 1 1/2" – 10 mil thick films cured 24 hours @ 77°F (25°C).
- **Corrosion:** After 72 hours @ 77°F (25°C) there is no evidence of corrosion on steel, aluminum, brass or silver.
- **Low Temp. Shock:** Dried films 1/16" thick withstand 3 foot-lbs. shock at -20°F (-29°C) without loss of adhesion.

Storage and Handling

Storage: Store product at 60-80°F (16-27°C) for maximum storage life. Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. Tubes must be stored in an inverted position (tips down). Rotate stock on a “first in-first-out” basis.

Shelf life: When stored in the original unopened container, under the conditions recommended, these products have a shelf life of 9-12 months @ 40°F (4°C).

Scotch-Seal™ Tamper Proof Sealant 1252

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 1-800-362-3550 or visit www.3M.com/adhesives. Address correspondence to: 3M Engineered Adhesives Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. 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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ISO 9002

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



Engineered Adhesives Division

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