



Technical Data Sheet

3M™ High Performance Industrial Plastic Adhesive 4693

Product Features

- 3M™ High Performance Industrial Plastic Adhesive 4693: low viscosity grade for spray or brush application.
- Clear, elastomeric adhesives with high immediate bond strength, long tack range and contact bond properties.
- Exhibit outstanding bond strength to many metals and many plastics such as ABS, glass filled polyester, polypropylene, linear polyethylene and hi-impact styrene.
- Dries to a tough, flexible and transparent film with good resistance to water and aging.

Note: Not recommended for use on Plasticized Vinyl. Use on Plasticized Vinyl may result in poor adhesion or bonds that deteriorate over time.

Technical Information Note

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







Typical Physical Properties

Property	Values	Additional Information
Solids Content by Weight	24 to 28 %	
Color	Clear	
Flash Point	1 °F	View
Notes: Closed Cup		
Flash Point	-17 °C	View
Notes: Closed Cup		
Carrier Solvent	Cyclohexane, acetone	
Coverage	308 sq ft/gal	View
Notes: @ 2.5 g/ft ² dry wt.		
Viscosity	175 to 275 cP	View
Notes: Brookfield Viscometer RVF #2 spindle @ 20 rpm		

Typical Uncured Physical Properties

Property	Values	Additional Information
Base	Synthetic Elastomer	
Net Weight	6.6 to 7 lb/gal	

Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	368 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to Aluminum</p> <p>Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)</p>		
180° Peel Adhesion	352 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to Steel</p> <p>Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)</p>		
180° Peel Adhesion	320 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to ABS</p> <p>Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)</p>		
180° Peel Adhesion	288 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to Acrylic</p> <p>Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)</p>		
180° Peel Adhesion	304 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to Nylon 6</p> <p>Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)</p>		
180° Peel Adhesion	320 oz/in	View 
<p>Dwell/Cure Time: 3.0 Dwell Time Units: day Environmental Condition: 50%RH Substrate: Canvas to Phenolic Board</p>		

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

180° Peel Adhesion

336 oz/in

View 

Dwell/Cure Time: 3.0
Dwell Time Units: day
Environmental Condition: 50%RH
Substrate: Canvas to Polyester, filled

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

180° Peel Adhesion

176 oz/in

View 

Dwell/Cure Time: 3.0
Dwell Time Units: day
Environmental Condition: 50%RH
Substrate: Canvas to Polyethylene, linear

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

180° Peel Adhesion

304 oz/in

View 

Dwell/Cure Time: 3.0
Dwell Time Units: day
Environmental Condition: 50%RH
Substrate: Canvas to Polypropylene

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

180° Peel Adhesion

320 oz/in

View 

Dwell/Cure Time: 3.0
Dwell Time Units: day
Environmental Condition: 50%RH
Substrate: Canvas to PVC, Hi-impact

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

180° Peel Adhesion

336 oz/in

View 

Dwell/Cure Time: 3.0
Dwell Time Units: day
Environmental Condition: 50%RH
Substrate: Canvas to Styrene, Hi-impact

Notes: 1-2 days @ Room Temperature and 1 day @120°F(49°C)

Storage and Shelf Life

Store product at 60-80°F (16-27°C) for maximum storage life. Higher temperatures can reduce normal storage life. Lower temperatures can cause increased viscosity of a temporary nature. Rotate stock on a “first in-first out” basis.

When stored at the recommended temperature in the original, unopened container this product has a shelf life of 30 months from date of manufacture.

Bottom Matter

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Handling/Application Information

Application Techniques

Porous Surface: Brush, spray or flow an even coat of adhesive to both surfaces. Very absorbent materials may require more than one coat. Bond while adhesive is tacky. Join surfaces with firm pressure.

Non-Porous Surface: Brush, spray or flow an even coat of adhesive to both surfaces. To achieve a satisfactory bond, adhesive must be force dried @ 180°F (82°C). Bond with firm pressure while warm.

Drying Time: Drying time depends on temperature, humidity, air movement and porosity of the materials bonded. When brushing, wait a minimum of 10 minutes. Bonds can be made up to 60 minutes. Sprayed bonds may be made almost immediately and up to 60 minutes.

Heat Reactivation: Adhesive may be heat reactivated by raising the glue line temperature to 180°F (82°C).

Cleanup: Excess adhesive may be removed with a solvent such as 3M™ Solvent No. 2.*

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

Application Equipment

Note: Appropriate application equipment can enhance adhesive performance. We suggest the following application equipment for the user's evaluation in light of the user's particular purpose and method of application.

1. Pumping: A 2:1 divorced design pump is suggested. All material hoses should be nylon or PVA lined. Packings and glands in contact with the adhesive should be PTFE lined.

2. Spray (Air Atomized):

Production Type Spray Equipment

*3 H.P. Compressor for intermittent use. 5 H.P. Compressor for continuous use.

**To Measure Fluid Flow: Pressurize fluid source only; pull trigger, flow material into measuring device for 60 seconds, increase or decrease fluid source pressure to obtain desired fluid flow.

3. Hoses: All material hoses should be nylon or PVA lined. If product is sprayed, use functioning spray booth.

4. Brush/Roller: Typical brushes/rollers designed for oil-based paint may be used.

Surface Preparation

Surfaces must be dry and free of dust, dirt, grease, oil, mold release materials or other contaminants. For best results, temperature of adhesive should be at least 65°F (18°C).

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40071871/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=4693

Family Group

Link Tags:

- [4693](#)
- [4693H](#)

Products	Solids Content by Weight	Color
4693	24 to 28 %	Clear
4693H	N/A	Clear

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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.

Information

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