



# Technical Data Sheet

## 3M™ Neoprene High Performance Rubber & Gasket Adhesive 1300L

### Product Description

3M™ Neoprene High Performance Rubber & Gasket Adhesives 1300 and 1300L are the most versatile of our rubber and gasket adhesives. They may be used to bond metal, wood, most plastics, and neoprene, reclaim, SBR, and butyl rubber. They have high immediate strength and excellent heat resistance. 3M Scotch- Weld Adhesive 1300L is a lower solids, lower viscosity version of 3M Adhesive 1300.

### Product Features

- 3M™ Neoprene High Performance Rubber & Gasket Adhesive 1300L meets specification requirements of MMM-A-121.
- Temperature performance range is -30°F (-34°C) to 300°F (149°C).
- Bonding Range: 3M Adhesive 1300 up to 12 minutes; 3M Adhesive 1300L up to 8 minutes.
- Bonds neoprene, SBR, butyl and other types of rubber to various substrates.
- 3M Adhesive 1300L is a lower solids viscosity version of 3M Adhesive 1300, for easier brushing and sprayability.

### 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	26 to 33 %	
Color	Yellow	
Flash Point	-14 °F	View
Notes: Closed Cup		
Flash Point	-26 °C	View
Notes: Closed Cup		
Carrier Solvent	Petroleum distillate, methyl ethyl ketone and toluene (These products contain non-photochemically reactive solvent)	
Viscosity	250 to 1000 cP	View
Notes: Brookfield Viscometer RVF #2 spindle @ 20 rpm		

## Typical Uncured Physical Properties

Property	Values	Additional Information
Base	Polychloroprene	
Net Weight	6.9 to 7.3 lb/gal	

## Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	288 oz/in	View 
Dwell/Cure Time: 24.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Canvas to Steel		
180° Peel Adhesion	768 oz/in	View 
Dwell/Cure Time: 72.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Canvas to Steel		
180° Peel Adhesion	816 oz/in	View 
Dwell/Cure Time: 120.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Canvas to Steel		
180° Peel Adhesion	832 oz/in	View 
Dwell/Cure Time: 168.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Canvas to Steel		
180° Peel Adhesion	480 (This value DOES NOT reflect a loss in strength – but do represent an increase in modulus. Because of the adherends and procedure, bond failure is from the canvas. The actual strength of these adhesives is increasing.) oz/in	View 
Dwell/Cure Time: 2.0 Dwell Time Units: week Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Canvas to Steel		

180° Peel Adhesion

320 (This value DOES NOT reflect a loss in strength – but do represent an increase in modulus. Because of the adherends and procedure, bond failure is from the canvas. The actual strength of these adhesives is increasing.) oz/in

[View](#) 

Dwell/Cure Time: 3.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Environmental Condition: 50%RH  
Substrate: Canvas to Steel

180° Peel Adhesion

784 oz/in

[View](#) 

Dwell/Cure Time: 3.0  
Dwell Time Units: week  
Temp C: -34C  
Temp F: -29F  
Environmental Condition: 50%RH  
Substrate: Canvas to Steel

180° Peel Adhesion

520 oz/in

[View](#) 

Dwell/Cure Time: 3.0  
Dwell Time Units: week  
Temp C: 66C  
Temp F: 150F  
Environmental Condition: 50%RH  
Substrate: Canvas to Steel

180° Peel Adhesion

416 oz/in

[View](#) 

Dwell/Cure Time: 3.0  
Dwell Time Units: week  
Temp C: 82C  
Temp F: 180F  
Environmental Condition: 50%RH  
Substrate: Canvas to Steel

Overlap Shear Strength

343 lb/in<sup>2</sup>

[View](#) 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

Overlap Shear Strength

549 lb/in<sup>2</sup>

[View](#) 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

Overlap Shear Strength

195 lb/in<sup>2</sup>

[View](#) 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

Overlap Shear Strength

136 lb/in<sup>2</sup>

[View](#) 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

Overlap Shear Strength 85 lb/in<sup>2</sup> View 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

Overlap Shear Strength 85 lb/in<sup>2</sup> View 

Dwell/Cure Time: 2.0  
Dwell Time Units: week  
Temp C: 23C  
Temp F: 72F  
Substrate: Birch to Birch

## Storage and Shelf Life

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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.

## Industry Specifications

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MMM-A-121

## Bottom Matter

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## Trademarks

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3M is a trademark of 3M Company.

## Automotive Disclaimer

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COMPATIBILITY, OR INTEROPERABILITY, OR ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.

## Handling/Application Information

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### Application Equipment

Note: Appropriate application equipment enhances 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:

##### 5 Gallon Pail Dispensing System:

1. 3M™ Neoprene High Performance Rubber & Gasket Adhesive 1300 – 4:1 double acting ball type check pump, 4 cu. in/cycle 3" air motor. Pail cover required to reduce solvent loss.

2. 3M™ Neoprene High Performance Rubber & Gasket Adhesive 1300L

– Use a pressure pot for material supply.

##### 55 Gallon Pail Dispensing System:

1. 3M Adhesive 1300 – 4:1 double acting ball type check pump, 4 cu. in/cycle 3" air motor, bung style pump.

2. 3M Adhesive 1300L – 2:1 divorced design pump.

### Accessories:

1. Hose – Samuel Moore Synflex or equivalent, 500 psi working pressure minimum.

### Chemical Resistance Requirements:

1. Packings, glands and hoses in contact with this adhesive must be resistant to ketones and aromatic solvents. Nylon and PTFE lined or coated parts are suggested.

#### 2. Spraying:

3M™ Neoprene High Performance Rubber & Gasket Adhesive 1300L

Note: These adhesives are not recommended for Airless Spraying.

\*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.

All material hoses should be nylon or PVA lined. Packings and glands in contact with these adhesives should be lined or coated with a non-stick surface.

#### 3. Brushes

Use brushes designed for oil based paint.

### Directions for Use

#### 1. Surface Preparation

Remove all dust, dirt, oil, grease, wax, loose paint, etc. Wiping with a solvent such as methyl ethyl ketone (MEK)\* will aid in preparing the surface for bonding.

#### 2. Application Temperature

For best results, the temperature of the adhesive and surfaces to be bonded should be at least 65°F (18°C). If stored below 30°F (-1°C), allow adhesive to warm to room temperature by placing in a warm room only (do not exceed 120°F [49°C]) followed by thorough agitation.

#### 3. Application

Stir well before using. Brush, flow or spray a thin, uniform coating of adhesive to each surface. A coating of 2.5 gms to 3.5 gms/ft.2 dry weight per surface is recommended. Porous surfaces may require more than one coat. A uniform, glossy film indicates sufficient adhesive.

#### 4. Drying Time

Allow adhesive to dry until no longer wet (maximum dry time about 4 minutes).

#### 5. Bonding Range

Once dry, these adhesives have a short bonding range (up to 8 to 12 minutes).

#### 6. Assembly

Position surfaces carefully before assembly. Bonding is immediate upon contact. Apply sufficient pressure to ensure good contact between coated surfaces. Bonded parts may be handled immediately.

#### 7. Reactivation

Greater immediate strength may be obtained by solvent reactivation. To solvent reactivate, coat both surfaces with adhesive and allow to dry tack free. Lightly wipe one surface with methyl ethyl ketone (MEK)\* and complete bonding within 30 seconds.

#### 8. Cleanup

Use a solvent such as 3M™ Solvent No. 2\* or methyl ethyl ketone (MEK)\* to clean brushes immediately after use. Excess adhesive may be removed from other surfaces with 3M™ Citrus Base Cleaner\* or equivalent.

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

## References

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/p/d/b5005321070/">https://www.3m.com/3M/en_US/p/d/b5005321070/</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=1300L">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=1300L</a>

## Family Group

Link Tags:

• 1300L

Products	Solids Content by Weight
1300L	26 to 33 %

## 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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