

December, 2007

## 3M™ Durable Tire Label Material FVT36

### Product Description

3M™ Durable Tire Label Materials utilize a flexible and conformable white label stock that offers durability, moisture resistance, and dimensional stability. 3M™ Adhesive G1120 is a rubber-based aggressive adhesive for use in tire label applications.



### Product Features

Specially formulated for improved adhesion to heavily micro-vented and mold release treated tires.

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### Technical Information Note

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

### Construction Tested

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 1.5 mils of adhesive on a stainless steel panel.

### Typical Physical Properties

Property	Values	
Facestock	Soft White Vinyl TC2	
Facestock Thickness	0.089 mm	3.5 mil
Adhesive	G1120 Tire 36	
Liner	50# SC Remoist – 20 1.4	
Convertability	The extremely high tack and severe flow properties make 3M™ Tire Tread Adhesive G1120 an excellent choice for labeling tire and other rubber surfaces. However, this adhesive is prone to adhesive ooze and processing issues. Please contact your local 3M Sales Representative for information on specific handling of rubber adhesives.	
Adhesive Coat Weight	3.6 g/100 in <sup>2</sup>	

### Note

Calipers are nominal values

### Typical Performance Characteristics

Property	Values		Method	Notes
Application Temperature	5 to 49 °C	40 to 120 °F		
Service Temperature Range	-29 to 60 °C	-20 to 140 °F		
180° Peel Strength	7.04 N/cm	64 oz/in	TLMI	12 in/min, 1 in wide sample
Loop Tack	7.04 N/cm	64 oz/in	TLMI	12 in/min, 1 in wide sample
Shear	1 hr		TLMI	1.0 in <sup>2</sup> x 1000g

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**Typical Performance Characteristics (continued)**

Property	Values		Method	Notes
Release Range	15 to 90 g/2 in		TLMI	180° removal, 300 in/min

**Available Sizes****Packaging**

All finished rolls must be loosely wound, properly stored, not tightly banded and shipped expeditiously to avoid any ooze issues between converting and the end use of the material.

**Environmental Performance**

Do not use this adhesive in applications where the label will be exposed to outdoor environments or water.

**Handling/Application Information****Application Ideas**

- Tire tread label applications
- Interior labels adhering to brick or cement surfaces

**Application Techniques**

- The liner release has not been optimized for auto applied or auto dispensed applications. This material can only be hand applied.
  - For maximum bond strength, surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol.
- Note: Consult the manufacturer's MSDS for proper handling and storage of solvents. For best conditions, application surface should be at room temperature or higher. Low temperature surfaces (below 10°F [-12°C]) can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds are achieved through increased rub down pressure.

**Printing**

The preferred print method for all tire materials is flexographic printing. If utilizing thermal transfer, be sure that the rolls have been properly stored, butt cut, pattern coated, and loosely wound to reduce adhesive ooze through the printer.

**Converting**

- Use Talc powder or cornstarch on the edges of the rolls if they become too tacky.
- Pattern coating of the adhesive is available and recommended for improved processability. For details concerning pattern coating, please contact your local 3M Sales Representative.
- Die cutting/matrix stripping of this material could lead to problems with excessive ooze and is not recommended. The preferred method of converting is butt cutting. No matter the cutting method used, be sure to utilize loose winding during both press and rewind operations.

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## Storage and Shelf Life

- Important – Do not store the material banded. Break the steel banking on the pallet upon receipt.
  - Do not store the material double stacked.
  - Store in a cool area if possible during summer months.
  - It is best not to ship over a weekend in summer months. Try to specify a ship date that will get the material directly to you during the week.
  - Rolls with excessive edge bleed are most likely to be found on the top layer directly under the wooden pallet top. These rolls can be salvaged by rewinding on a table top rewinder and then using Talc powder on the edges. This should be done as soon as possible.
  - Recommended storage conditions are 72°F (22°C) and 50% relative humidity.
- To obtain best performance, use this product within 6 months from date of manufacture.

## Family Group

	FVT30	FVT36
Facestock	Soft White Vinyl TC2	Soft White Vinyl TC2
Facestock Thickness (mm)	0.089	0.089
Adhesive	G1120 Tire 30	G1120 Tire 36
Liner	50# SC Remoist – 20 1.4	50# SC Remoist – 20 1.4

## References

1. Safety Data Sheet

Url: [https://www.3m.com/3M/en\\_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en\\_US&co=ptn&q=FVT36](https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=FVT36)

## ISO Statement

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

## Technical Information

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