



# BULLET LINER 2

## Description

BULLET LINER 2 is a plural component polyurea hybrid spray-in-place elastomer, designed for high pressure equipment. This product provides a flexible but extremely tough monolithic membrane.

## Proposed Uses

BULLET LINER 2 is a fast cure, textured surface, purpose build material designed for automotive applications such as pickup truck bed liners. It exhibits excellent adhesion to most materials and is suitable as a protective-abrasive-impact liner for cementitious, wood, and/or metal surfaces. BULLET LINER 2 exhibits excellent qualities for military applications.

Product Application Parameters			
Property	Test Method	"A"	"B"
Specific Gravity	ASTM D-1638	1.15	1.08
Viscosity	Brookfield LVF	600 cps +100	1000 cps +100
Mixing Ratio	By Volume	1	1
Mixing Ratio	By Weight	53	47
Pounds Per Gallon	From Spec. Gravity	9.6	8.56
Temp. At Spray Gun	N/A	145° F	145° F
Gel Time (string)	N/A	6 seconds	6 seconds
Dry to Touch	N/A	10 seconds	10 seconds
Total Cure	N/A	24 hours	24 hours
Cured Film Service Temp.	N/A	-40°F to 200°F	-40°F to 200°F
Relative Humidity	N/A	MAX 85%	MAX 85%

## Physical Properties

Property	Result
Shore A Hardness (ASTM D-2240)	85 - 90
Density (pcf) (ASTM D-1622)	70
Tensile Strength (ASTM D-2370)	2100 psi minimum
Abrasion Resistance (taber) (D-4060)	0.3% per 1,000 cycles or less
Elongation % (ASTM D-2370)	100 % minimum
Tear Strength (ASTM D-1004)	300 pli minimum
Moisture Vapor Transmission, Perms (E96)	0.025 @ 30 MILS

## Application Requirements

### Spray Equipment

Spray equipment must be designed to produce a minimum of 2,000-psi with an output of 1.5 gallon per minute. The heating component of the equipment must be able to maintain a temperature at the gun of 150°F. The hose on the equipment must be heated and be rated a minimum of 3,000-psi burst pressure. The spray gun must also be rated at the pressures and throughputs required.

### Substrate Parameters

The substrate must be dry! A minimum of 5°F above the dew point is mandatory. The ambient relative humidity should not be above 85%. Pin holing may occur if the above parameters are not strictly followed. Applicator shall check initial climatic conditions. A small area shall be sprayed and checked for proper application. Applicator may continue, if upon close inspection, the sprayed sample meets quality standards.

### Disclaimer

The data presented herein is not intended for use by nonprofessional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent test in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

**Call Carlisle Polyurethane Systems for technical questions. 855-2-BULLET (28-5538).**

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## Processing Characteristics

Property	Result
<b>Component Temperature at Spray Head:</b>	
A Component	145°F - 160°F
B Component	145°F - 160°F
Minimum System Pressure	2000 psi
Gel Time	6 seconds
Cure Time	24 hours
Recommended Application Temp. Range	40°F - 90°F

## Coverage

The material theoretically will cover 1,600 square feet/100 gal drum set at 100 mil dry film thickness. Coverage of the substrate should include a waste factor based on conditions at the site and type of substrate to which the material is being applied.

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