

## Product Bulletin

### Reflexite<sup>®</sup> V82 School Bus Conspicuity Material



#### The Product

Reflexite V82 School Bus Conspicuity Material is a tough weather-and solvent-resistant product designed for rugged outdoor use on the sides, rear and exit points of school buses. It is easy to apply to smooth surfaces or to surfaces where tape must be cut around rivets and other design features.

#### Construction

Reflexite V82 School Bus Conspicuity Material is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced, tough and weather-resistant UV-stabilized polymeric film. The prism surfaces are coated with a vacuum deposition of aluminum to provide a mirror surface to the prism facets. The resulting tape is not more than .008 inches thick and comes with an aggressive high-tack pressure-sensitive adhesive.

#### Colors

Reflexite V82 School Bus Conspicuity Material is available in school bus yellow color. The color conforms to the requirements in the following table when tested in accordance with ASTM standards

E1347 and E1349. The measured values are the average of eight readings. The test sample is rotated 45° about its own axis after each reading. See Table 1.

#### Reflectivity

Reflexite V82 School Bus Conspicuity Material shall meet or exceed the minimum coefficient of retroreflection shown below. Reflexite V82 School Bus Conspicuity Material shall be measured in accordance with ASTM E810 and rotation angles of 0° and 90°. See Table 2.

#### Adhesive

The adhesive is especially formulated to adhere to a variety of surfaces including fiberglass, aluminum, steel and painted metal. The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or other solvents. The adhesive produces such a bond that a one-inch wide strip shall support a 1-3/4 pound weight for 5 minutes without the strip peeling for a distance of more than 2.0 inches when applied to a smooth aluminum panel as specified in the ASTM D4956 adhesion test.

**TABLE 1**  
**COLOR SPECIFICATION LIMITS**  
 Chromaticity Coordinates\*

Color	1		2		3		4		Reflectance Y	
	x	y	x	y	x	Y	x	y	Min.	Max.
Yellow	0.484	0.455	0.517	0.482	0.544	0.455	0.513	0.426	10.0	36.0

\* The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with CIE Standard Illuminant D<sub>65</sub>.

**TABLE 2**  
**COEFFICIENT OF RETROREFLECTION**  
 (Candelas/Lux/Square Meter)

Observation Angles	Entrance Angles	Yellow
0.2°	-4°	470
0.2°	30°	270
0.5°	-4°	148
0.5°	30°	56

Reflexite V82 School Bus Conspicuity Material fully meets or exceeds the requirements of the 2005 National School Transportation Specifications and Procedure and CSA D250.

### Impact Resistance

Following application to a smooth-surfaced aluminum rectangle 0.040 inch by 3.0 inch by 6.0 inch, the specimen is conditioned for 24 hours at 72° F and 50% relative humidity. The sheeting shall show no cracking or delamination outside the actual area of impact when the face of the panel is subjected to an impact of a 4.0 pound weight with 5/8 inch rounded tip dropped from a 100 inch-pound setting on a Gardner variable impact tester, IG-1120.

### Shrinkage

A 9 inch by 9 inch specimen of the sheeting with liner is conditioned a minimum of 1 hour at 72° F and 50% relative humidity. The liner is then removed and the specimen is placed on a flat surface with the adhesive side up. Ten minutes after the liner is removed and again after 24 hours, the specimen is measured to determine the amount of dimensional change. The specimen will not shrink in any dimension more than 1/32 inch in 10 minutes and 1/8 inch in 24 hours.

### Flexibility

The sheeting is conditioned for 24 hours at 72° F and 50% relative humidity. The release liner is removed and the sheeting is sufficiently flexible to show no cracking when bent in one seconds time around a 1/8 inch diameter mandrel with the adhesive contacting the mandrel.

### Solvent Resistance

Reflexite V82 School Bus Conspicuity Material meets the requirements of LS-300C solvent resistance, section 3.6.7, when tested as specified in Table VI, test method 4.4.6.

### Application

Reflexite V82 School Bus Conspicuity Material should be applied to a smooth, clean, dry surface at temperatures ranging from 50°F to 100°F.

### Durability

10 years

### Warranty


10 year limited warranty.  
Contact your Reflexite representative for details.

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