



Scotchlite™

Reflective Material

8471 Fluorescent lime-yellow Vest Trim

8472 Fluorescent red-orange Vest Trim

Technical Data Sheet

January 1999

Description

3M™ Scotchlite™ Reflective Material - 8471 Fluorescent lime-yellow Vest Trim and 3M™ Scotchlite™ Reflective Material - 8472 Fluorescent red-orange Vest Trim consist of an exposed, wide-angle lens reflective silver stripe centered on a durable polyester fluorescent cloth backing.

Retroreflective Performance

The coefficient of retroreflection (R_A , in cd/lux/m²) is measured by methods traceable to either of the following retroreflective intensity testing procedures:

- ASTM E809 and E810 (R_A)
- CIE 54: 1982 (R')

The R_A values were measured at the listed specific entrance and observation angles for the reflective silver stripe.

Entrance Angle	Observation Angle	Typical R_A	Minimum R_A
-4.0°	0.2°	500	330
+5.0°	0.33°	330	250

Color

Product Number	Daytime Color	Reflected Color
8471	Fluorescent lime-yellow with silver stripe	White
8472	Fluorescent red-orange with silver stripe	White

Physical Performance

The reflective stripe of Scotchlite reflective material - 8471 fluorescent lime-yellow vest trim and Scotchlite reflective material - 8472 fluorescent red-orange vest trim will maintain a minimum R_A of 100 after exposure to the following performance tests:

- Abrasion: prEN 530 Method 2
5000 cycles
- Flexing: ISO 7854 Method A
7500 cycles
- Cold Fold: ISO 4675 (-20°C)
- Temperature Cycle: 12 hours @ (50±5)°C
20 hours @ (-30±2)°C
- Wet Reflectivity: EN 471 Annex A

Performance

While use of 3M™ Scotchlite™ Reflective Material enhances visibility, no reflective material can guarantee absolute visibility, particularly in adverse weather conditions. Performance will vary depending upon actual use, exposure conditions and maintenance. Users should test reflective material to satisfy conformance to their own requirements.

Application Instructions

Whenever two or more pieces of 3M™ Scotchlite™ Reflective Material - 8471 Fluorescent lime-yellow Vest Trim or 3M™ Scotchlite™ Reflective Material - 8472 Fluorescent red-orange Vest Trim are used together on a single surface or as a set, they should be matched to ensure uniform daytime color and nighttime or low-light reflectivity.

Cutting: Hand-cut or guillotined.

Sewing: Sew in place using a lockstitch with no more than 12 stitches per inch (2.54 cm), and not less than 5/64" (2 mm) from the edge of the trim. For best results, apply to light and medium weight fabrics.

Care and Maintenance Instructions

Important: Test each application according to appropriate care instructions required for the finished product. Actual life of the trim depends on cleaning method and wear conditions. Vest trim is designed for limited home wash applications and can withstand up to 10 home wash and dry cycles with minimum performance loss.

Wash: Machine wash warm, 40°C (105°F)



Dry: Tumble dry low



Product Availability

Scotchlite reflective material - 8471 fluorescent lime-yellow vest trim and Scotchlite reflective material - 8472 fluorescent red-orange vest trim are available in rolls with the following standard widths and roll lengths:

Trim Width	Reflective Strip Width	8471 Roll Length	8472 Roll Length
1 1/2"	1/2"	100 yd.	300 yd.
2"	5/8"	100 yd.	300 yd.

Order and Product Information

To order 3M™ Scotchlite™ Reflective Material Products contact 3M Personal Safety Products Department Customer Service at 800-328-7098 Ext. 2.

Storage and Shelf Life

Store in a cool, dry area and use within two years after date of receipt. Store rolls in original shipping cartons. Return partially used rolls to the carton or suspend horizontally through the core.

Important Notice to Purchaser:

Except where prohibited by law, 3M makes the following limited warranty in place of any others, express or implied, including any implied warranties or conditions of MERCHANTABILITY or fitness for a particular purpose or any implied warranty or condition commonly found in the industry: 3M shall replace or, at its option, refund the price paid to 3M for any 3M™ Scotchlite™ Reflective Material or other 3M reflective products (“Products”) which at the time of shipment to 3M’s purchaser do not meet 3M’s published Product specifications.

Because of the unlimited variety of potential applications for Products, BEFORE production use, the User (which may be a converter or end product manufacturer or others) must determine that the Products are suitable for the intended use and are compatible with other component materials. User is solely responsible for determining the proper amount and placement of Products. While reflective Products enhance visibility, no reflective product can ensure visibility or safety under all possible conditions. **3M shall not be liable in contract or in tort, for any indirect, incidental, special, or consequential damages (including, without limitation, lost profits, goodwill and business opportunity) relating to the use or inability to use the Products.**



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