

# PRODUCT INFORMATION FOR **BEMIS** BRILLIANT® COLOR REFLECTIVE FILM

### PRODUCT DESCRIPTION

Reflecto Reflective Fabric 3011 is made of Bemis Brilliant<sup>®</sup> Color Reflective which is a high-brightness, colorized, pressure sensitive adhesive (PSA) backed reflective material. It is composed of colour-coated wide-angle retroreflective glass beads attached to a cloth fabric and laminated with Safe Reflections Inc.'s Tribondex PSA. The reflective side is exposed, and the adhesive material is covered with a protective paper liner.

#### FIELDS OF APPLICATION

Brilliant<sup>®</sup> Color Reflective is used to enhance the visibility of any object while providing an improved aesthetic over traditional silver reflective.

- hard surfaces such as protective helmets, water bottles, metal bicycle frames, running shoes, eyewear, stationary obstacles
- fabric surfaces such as outdoor jackets, dog collars, backpacks, luggage, rain gear
- great alternative to sew-on and iron-on patches
- excellent for retrofitting existing products for enhanced visibility
- can be used as a design element on a garment

For most effective visibility, product should be applied on all sides of the object.

#### **SPECIFICATIONS**

- Reflective Material: Bemis Brilliant<sup>®</sup> Color Reflective Film (USPatentNoUS8470394B and WIPONoWO2015030770A1)
- Input Material: 3M<sup>™</sup> Scotchlite<sup>™</sup> 8912N Reflective Material
- **Sustainability:** Product is Oeko-Tex Standard 100 Class 1 certified, Appendix 4



#### • Brilliant<sup>®</sup> Color Retroreflective Performance:

- Typical Initial Retroreflectivity: >350 cd/lux-m2
- Minimum Initial Retroreflectivity: >300 cd/lux-m2
- Retroreflectivity after 25 domestic washing cycles: > min. 100 cd/lux-m2
  - The coefficient of retroreflection (RA, in cd/lux/m2) of Brilliant™ Colorized Reflective Material is measured based on test procedures ASTM E809-02 and E810-03 (RA) for measurement of retroreflective intensity.
  - The RA values generated were measured at +5.0 entrance and 0.2 observation angles (head-on-brightness).
  - 3M<sup>™</sup> Scotchlite<sup>™</sup> Reflective Material silver products have an initial average RA of 500 cd/lux/m2 and a minimum RA of 330 cd/lux/m2.

#### ADHESIVE PERFORMANCE:

- It is designed to have high initial "wet out" and superior anchorage in demanding conditions.
- Good adhesion to metals and many other hard and soft goods.
- Good chemical and plasticizer resistance as well as ability to withstand environmental extremes.
- Product Features:
  - Performs well over a wide temperature range
  - Adhesive film laminates well to a variety of substrates
  - Extremely high tack and quick stick
  - Offers very high peel strength
  - Excellent humidity and water soak resistance
- Performance Specifications:
  - Adhesive Thickness: 0.13 mm
  - Release Liner Thickness: 0.14 mm
  - Adhesive Color: Clear



#### • Adhesive Test Data:

Peel Adhesion (PSTC 1 Mod./180°)	Oz./Inch	(N/cm)
To Stainless Steel (20 min. @ RT: -Initial)	100-200	(71 –141)
To Untreated Polyethylene (20 min. @ RT: -Initial)	35 - 65	(25 - 46)

- Holding Power (PSTC 7 Mod./178<sub>0</sub>): 2.2 psi (1"x1"x1000 g) @ RT: > 5 h
- Service Temperature Range: 40 °C bis + 93 °C
- Humidity Resistance:
  - % Peel Retention after 1 week @ 38 °C/100 % RH: 96 %
- Water Resistance: % Peel Retention after 24-hour soak: 95 %

## APPLICATION INSTRUCTION

- peel off the protective carrier film and apply the adhesive side to the desired surface
- apply firm pressure
- recommended application temperature is higher than 18°C to achieve best results
- proper bonding may not occur unless adhesive and surface material are above 18°C

**Note:** When applying pressure sensitive adhesive films to any surface, be sure that the surface is free from oil or other surface contaminates such as powder, dust or release agents. Adhesive performance should be carefully checked when used on substrates containing plasticizers.

# The information given is based exclusively on the manufacturer's specifications. We do not assume any liability for the accuracy of this information.

www.reflecto.de/en