

SWARCO PREFORMED THERMOPLASTIC

TECHNICAL INFORMATION

PRODUCT TYPE: GREEN

Specification: Meets general requirements for ASTM & AASHTO, specifics below.



Specifications	ASTM D 4592	ASTM D 6628
	ASTM E 303	ASTM E 1710
	AASHTO M249	AASHTO T-250

PHYSICAL PROPERTIES

- **Graded Glass Bead** The preformed thermoplastic material shall have a minimum of 30% uniformly distributed glass beads throughout the entire cross-section of the material. The intermixed beads shall be clear and transparent and no more than 20% shall consist of irregular fused spheroids, or silica. The index of refraction shall not be less than 1.50. The material must have factory applied coated surface beads in addition to the intermixed beads at a rate of 1lb. (+/- 10%) per 11 sqft. These factory applied coated surface beads shall have the following specifications:

 1. Minimum 80% rounds
 2. Minimum refractive index of 1.5
 3. Minimum SiO₂ content of 70%
 4. Maximum iron content of 0.1%
- **Initial Reflectivity** 50 min mcd/sq ft/lux
- **Skid Resistance** ASTM E 303; Minimum Initial ≥60
- **Heat Indicators** The material shall have uniformly spaced indicators on the top surface that serve as a visual cue as to when the material has reached the desired molten state for proper adhesion and glass bead embedment.

- **Color Coordinates** ASTM D 6628; pavement markings specifically created with color in mind, and manufactured to conform to standard traffic marking color requirements.

The material shall be manufactured with the appropriate pigment to ensure that the resulting color complies with the light green color as specified in the FHWA Memorandum dated 4/15/2011: Interim Approval for Optional use of Green Colored Pavement for Bike Lanes (IA-14).

- The daytime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
X	Y	X	Y	X	Y	X	Y
0.230	0.754	0.266	0.500	0.367	0.500	0.444	0.555

The daytime luminance factor (Y) shall be at least 7, but no more than 35.

- The nighttime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
X	Y	X	Y	X	Y	X	Y
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

- The pigments shall not contain heavy metals nor any carcinogens, as defined in 29 CFT 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

APPLICATION PROPERTIES

- **Conditions** Proper surface preparation is essential to obtaining consistent adhesion of the road marking tape. The surface must be free of loose or caked dirt, gravel, oily residues, salt residues or other foreign materials. Thoroughly read application instructions prior to use or contact your Swarco sales representative.
- **Temperature** The minimum recommended application temperature is 32° F (0° C) for the air and the roadway surface, with both temperatures rising, provided that the method of preheating the road surface prior to installation, as highlighted in the product application instructions is followed. The markings are best applied when night-time temperatures remain above freezing. Do not install on roadways which have had rainfall within 24 hours prior to application.

STORAGE

Markings should be stored indoors at temperatures between 50° F (15° C) and 100° F (38° C).

Shelf life is 24 months from receipt of material in original packaging.

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy and completeness thereof is not guaranteed. Data is subject to alteration due to technical advances.

Above information not to be taken as a warranty or representation for which we assume legal responsibility. It is offered solely for consideration, investigation and verification.

If you have any questions about proper application techniques or other technical support issues, please contact your SWARCO sales or customer service representative.