

**Description:**

The weatherproof, self-adhesive, retro-reflective ORALITE® reflective films series 5600 E FLEET MARKING GRADE boast high flexibility combined with excellent corrosion and solvent resistance.

The retro-reflective system of the ORALITE® reflective films series 5600 E FLEET MARKING GRADE consists of catadioptric glass beads which are embedded in a transparent layer of plastic material.

The ORALITE® reflective films series 5600 E FLEET MARKING GRADE comply with ECE Regulation No. 104 for material class E. The reflective material displays an approval (water mark) applied every 100 mm. The approval mark shows the material class (E), the ECE regulation number (104) and the approval number (002246).

**Surface:**

Special cast PVC film

**Covering material:**

PE coat applied to silicone-coated cardboard on either side, 145 g/m<sup>2</sup>.

As the article and reel numbers are applied to the silicone-coated cardboard, it is possible to completely trace back all production parameters and raw materials.

**Adhesive:**

Solvent polyacrylate, permanent, removable by heat

**Area of use:**

ORALITE® reflective films series 5600 E FLEET MARKING GRADE were especially developed for high-quality car wrappings to produce lettering, markings and decorations which may be applied within contour markings in accordance with ECE 104. They are suitable for use on cutting plotters and provide good adaptability including to corrugations and rivets.

**Printing methods**

Solvent-based ink jet printing, screen printing

**Recommended printer**

See recommended printers [www.orafol.de](http://www.orafol.de)

**Recommended laminating films**

ORAGUARD® 290F, ORAGUARD® 293F

**Technical data**

**Maximum values for the coefficient of retro-reflection** (according to ECE 104, material class E)

	Specific coefficient of reflex luminous intensity R <sup>c</sup> in cd·lx <sup>-1</sup> ·m <sup>-2</sup>			
Observation angle (°)	0.33			
Lighting angle (°)	5	30	40	60
for any colour	49.5	21.5	12.2	1.65

**Colours**

ORALITE® reflective films series 5600 E FLEET MARKING GRADE are available in the following 15 colours:

- 5600 E – 010 white
- 5600 E – 020 yellow
- 5600 E – 030 red
- 5600 E – 035 orange
- 5600 E – 040 violet
- 5600 E – 050 blue
- 5600 E – 053 light blue
- 5600 E – 054 turquoise
- 5600 E – 060 green
- 5600 E – 070 black (When being illuminated in darkness, it appears silver to silver-grey.)
- 5600 E - 080 brown
- 5600 E – 084 azure
- 5600 E – 091 gold
- 5600 E – 213 lemon
- 5600 E – 364 ruby

<b>Thickness*</b> (without protective paper and adhesive agent)	90 micron to 140 micron
<b>Temperature stability</b> (applied to aluminium)	-50°C to +95°C
<b>Adhesive power*</b> (FINAT-TM1 after 72h) stainless steel, acrylic coating	17.0 N/25mm 17.5 N/25mm
<b>Tensile strength</b> (DIN 53455)	along: min 10 N/mm <sup>2</sup> across: min 10 N/mm <sup>2</sup>
<b>Elongation at break</b> (DIN 53455)	along: min 100 % across: min 100 %
<b>Shelf life**</b>	2 years
<b>Application temperature</b>	> 0°C
<b>Service life by specialist application</b> under vertical outdoor exposure (standard Central European climate)	7 years

\* Average value    \*\* in original packaging at 20°C and 50% relative humidity

#### Note

The **processing and handling instructions for reflective products and digital printing materials** contain further information to be observed in addition to this technical data sheet. When laminating films are to be used, it is important to carefully dry out the colours after printing in order not to compromise the subsequent application of a laminating film, if any. The receiving surface must be free from dust and fat. When applying a new coating, the receiving surface should have been dried out and cured completely for a minimum of three weeks. The coatings planned should be subjected to a compatibility test. The self-adhesive reflective material must be applied in a dry state only.

The statements in this information are based on our practical knowledge and experience. Due to the wide variety of possible influences that may occur during processing and application, we recommend our customers to independently test the suitability of our products for their specific purpose. The above data is given without any guarantee regarding certain properties.

