

**Description:**

The weatherproof, self-adhesive, retro-reflective ORALITE® reflective films series 5600 FLEET ENGINEER GRADE boast high flexibility combined with excellent corrosion and solvent resistance. The retro-reflective system of the ORALITE® reflective films series 5600 FLEET ENGINEER GRADE consists of catadioptric glass beads which are embedded in a transparent layer of plastic material (design A, formerly Type I). The reflection data corresponds to class RA 1.

**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 FLEET ENGINEER GRADE were especially developed for high-quality car wrappings to produce lettering, markings and decorations. 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****Typical values for the coefficient of retro-reflection** (measured according to DIN 67520)

Observation angle (°)	Specific coefficient of reflex luminous intensity R' in cd·lx <sup>-1</sup> ·m <sup>-2</sup>			
	0.2		0.33	
Lighting angle (°)	5	30	5	30
5600 – 010 white	100	40	80	35
5600 – 020 yellow	60	25	45	20
5600 – 030 red	20	8	16	6
5600 – 035 orange	28	10	23	8
5600 – 040 violet	20	8	16	6
5600 – 050 blue	6	2	4	1
5600 – 053 light blue	45	16	35	12
5600 – 054 turquoise	33	12	24	8
5600 – 060 green	13	5	11	5
5600 – 070 black	25	10	20	8
5600 – 080 brown	5	2	3	1
5600 – 084 azure	9	4	7	2.5
5600 – 091 gold	70	27	50	22
5600 – 213 lemon	75	30	55	25
5600 – 364 ruby	16	6	11	4

**Colours**

ORALITE® reflective films series 5600 FLEET ENGINEER GRADE are available in 15 different colours (see table: typical values for the coefficient of retro-reflection).

ORALITE® 5600-070 displays a black colour at daylight. When being illuminated in darkness, it appears silver to silver-grey.

<b>Thickness*</b> (without protective paper and adhesive agent)	110 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>	> 15°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.

