

Description

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

The retroreflective 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.

Front material

Special cast PVC film

Release paper

PE coat applied to silicone-coated cardboard on either side, 145 g/m².

As the product and batch number are applied to the silicone-coated paper, all production parameters and raw materials can be completely traced back.

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 method

Inkjet printing with solvent based inks, UV- or Latex inks;

Screen printing

Recommended laminating films

ORAGUARD® 290F, ORAGUARD® 293F

Technical data

Typical values for the coefficient of retroreflection (measured according to DIN 67520)

Observation angle (°)	Specific coefficient of retroreflection R' in cd·lx ⁻¹ ·m ⁻²			
	0.2		0.33	
	5	30	5	30
white (010)	100	40	80	35
yellow (020)	60	25	45	20
red (030)	20	8	16	6
orange (035)	28	10	23	8
violet (040)	20	8	16	6
blue (050)	4	1.7	2	1
light blue (053)	45	16	35	12
turquoise (054)	33	12	24	8
green (060)	13	5	11	5
black (070)	25	10	20	8
brown (080)	5	2	3	1
azure (084)	9	4	7	2.5
gold (091)	70	27	50	22
lemon (213)	75	30	55	25
ruby (364)	10	5	8	4

Colours

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

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

Thickness* (without protective paper and adhesive)	110 micron to 140 micron
Temperature resistance***	adhered to aluminium: -50 °C to +95 °C
Adhesive power* (FINAT TM1 after 72h)	adhered to stainless steel: 17.0 N/25mm adhered to acrylic coating: 17.5 N/25mm
Tensile strength (DIN 53455)	along: min 10 N/mm ² across: min 10 N/mm ²
Elongation at break (DIN 53455)	along: min 100% across: min 100%
Shelf life**	2 years
Application temperature	> 15°C
Service life by specialist application under vertical outdoor exposure (normal climate of Central European)	7 years

* Average value ** in original packaging at 20°C and 50% relative humidity *** normal climate of Central Europe

Note

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The selfadhesive reflective material can only be used for dry application. Furthermore the application information published by ORAFOL® are to be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.

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.

