

### **Description**

ORALITE® - Reflective films Series 5400 COMMERCIAL GRADE are weatherproof, self-adhesive retroreflective films with an excellent corrosion and solvent resistance.

The retroreflective system of the ORALITE® - Reflective films Series 5400 COMMERCIAL GRADE consists of catadioptric glass beads which are embedded in a transparent layer of plastic material (classification RA1, design A, former Typ I). The smooth surface has a high scratch resistance and a good printability. The minimum reflection data corresponds to the EN 12899-1. The day-light colours corresponds to the international norms for reflective materials of this class.

### **Front material**

Special cast PVC film

### **Release paper**

PE-coated silicone paper, 145g/m<sup>2</sup>.

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

### **Area of use**

ORALITE® - Reflective films Series 5400 COMMERCIAL GRADE were especially developed for the manufacture of guidance and information signs as well as for reflective advertising art, which are intended for a short-term outdoor use and which require just a minimum of retroreflection.

They are suitable both for digital printing with solvent based inks and for use on cutting plotters and provide good adaptability including to uneven surfaces.

The smooth surface shows a high scratch resistance and impact strength, and a very good printability. The colours at daylight comply with the international specifications for reflective materials of this class. The ORALITE® 5400 COMMERCIAL GRADE has an adhesive with an excellent adhesion on metallic surfaces as aluminium and zinc coated steel plate.

When using the ORALITE® - Reflective films Series 5400 COMMERCIAL GRADE, the particular national specifications have to be complied with.

### **Printing method**

Solvent-based ink jet printing;

Screen printing: The use of ORALITE® - Screen printing inks serie 5018 is recommended.

A transparent coating is not necessary.

### **Recommended laminates**

ORAGUARD® 290F, ORAGUARD® 293F

The statements in this information sheet are based upon our knowledge and practical experience. This data is intended only as a source of information and is given without guarantee and does not constitute a warranty. Due to the wide variety of possible uses and applications customers should independently determine the suitability of this material for their specific purpose, prior to use.



**Technical data**

**Minimum reflection data** (DIN 67520 Part 1)

Observation angle Entrance angle	Specific coefficient of retroreflection R' in cd / lx per m <sup>2</sup>								
	0,2°			0,33°			2°		
	5°	30°	40°	5°	30°	40°	5°	30°	40°
white 010	70	30	10	50	24	9	5	2,5	1,5
yellow 020	50	22	7	35	16	6	3	1,5	1
orange 035	25	10	2,2	20	8	2,2	1,2	0,5	
red 030	14,5	6	2	10	4	1,8	1	0,5	0,5
green 060	9	3,5	1,5	7	3	1,2	0,5	0,3	0,2
blue 050	4	1,7	0,5	2	1				

**Thickness\*** (without protective paper and adhesive) 90 micron

**Temperature resistance** adhered to aluminium, -50°C to +82°C

**Adhesive power\*** 15 N/25mm (film tear)  
 (FINAT TM 1, after 24h, stainless steel)

**Shelf life\*\*** 2 years

**Application temperature** > +10°C

**Service life by specialist application** 4 years (not printed)  
 under vertical outdoor exposure  
 (standard central European climate)

\* average            \*\* in original packaging, at 20°C and 50% relative humidity

**Attention**

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 allowed to dry for at least three weeks and to completely cure respectively. 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 for both ORALITE Reflective Films and Digital Printing Materials published by ORAFOL® are to be considered.

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