

Description

Premium cast PVC film, developed for emergency vehicles, with high visibility in all daylight conditions. Especially effective in dawn and in conditions of low visibility. The ORACAL® 7710 Fluorescent Premium Cast Plus series is available in the following colours: 029 (fluorescent yellow) and 039 (fluorescent red).

Release Paper

Special Silicone coated paper on one side, 137 g/m²

Adhesive

Solvent polyacrylate, permanent

Daytime Colour Specification

In new condition, the colour coordinates (x, y) are within the colour ranges defined by 4 corner points in Table 1, the luminance factor (β) reaches the specified minimum value:

| Table 1 – Colour coordinates* in new condition | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| Colours | 1 | | 2 | | 3 | | 4 | | Luminance Factor β |
| | x | y | x | y | x | y | x | y | |
| fluorescent yellow (029) | 0,400 | 0,580 | 0,371 | 0,541 | 0,415 | 0,511 | 0,444 | 0,550 | > 0,80 |
| fluorescent red (039) | 0,620 | 0,380 | 0,530 | 0,380 | 0,590 | 0,320 | 0,680 | 0,320 | > 0,30 |

* measured according to CIE No. 15, standard illuminant D65, standard visual conditions CIE 45/0°

After accelerated, artificial weathering, the colour coordinates (x, y) are within the colour ranges defined by 4 corner points in Table 2, the luminance factor (β) reaches the specified minimum value:

| Table 2 – Colour coordinates* after weathering** | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| Colours | 1 | | 2 | | 3 | | 4 | | Luminance Factor β |
| | x | y | x | y | x | y | x | y | |
| fluorescent yellow (029) | 0,400 | 0,580 | 0,371 | 0,541 | 0,436 | 0,496 | 0,465 | 0,535 | > 0,60 |
| fluorescent red (039) | 0,620 | 0,380 | 0,570 | 0,380 | 0,630 | 0,320 | 0,680 | 0,320 | > 0,25 |

* measured according to CIE No. 15, standard illuminant D65, standard visual conditions CIE 45/0°

** accelerated weathering according to EN ISO 4892-2 over 2000h (roughly comparable to a service life of 4 years in Central European normal climate with vertical orientation)

Area of use

Designed for graphics that require high grades of visibility such as emergency vehicles. The ORACAL® 7710 is recommended for wet application and can be processed well on die-cut plotter systems.

Technical Data

| | |
|---|--|
| Thickness ⁽¹⁾ (without protective paper and adhesive) | 170 micron |
| Dimensional stability ⁽¹⁾ (FINAT TM 14) | Adhered to steel, shrinkage 0.15 mm max. |
| Temperature resistance ⁽²⁾ | Adhered to aluminium, -50° C to +120° C, no variation |
| Sea water resistance (DIN EN ISO 9227) | Adhered to aluminium, after 100h/35° C, no variation |
| Resistance to solvents and chemicals | At room temperature, 72h after adhesion to aluminium, short-term resistance to most oils and greases, fuels, aliphatic solvents, weak acids, salts and alkalis |
| Adhesive power ⁽¹⁾ (FINAT TM 1, after 24h, stainless steel) | 18 N/25 mm |
| Tensile strength ⁽¹⁾ (DIN EN ISO 527) | Along: > 18 MPa Across: > 18 MPa |
| Elongation at break ⁽¹⁾ (DIN EN ISO 527) | Along: > 150% Across: > 150% |
| Shelf life ⁽³⁾ | 2 years |
| Application temperature | > +8° C |
| Maximum service life by specialist application and proper care and usage applies for vertical outdoor exposure. ⁽⁴⁾ | 4 years |

⁽¹⁾ average ⁽²⁾ short-time exposure ⁽³⁾ vertical in original packaging, at 20° C and 50% relative humidity ⁽⁴⁾ normal climate of Central Europe. The real and expected durability depends mainly on the environmental conditions, but also on the pre-treatment of the substrate and the regular care. Please follow the additional notes at the end of this datasheet. Further information is available here:

www.orafol.com/gp/europe/en/support

Note

Surfaces to which the material will be applied must be thoroughly cleaned and free from dust, grease or any other contamination that 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. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. Furthermore, the application information published by ORAFOL must be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.

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