

Description

ORALITE® FD 1405 is a tough weather and solvent resistant product designed for rugged outdoor maritime use. It was specifically designed for use on inflatable devices, such as life preservers or jackets and life rafts. It is compliant with the International Maritime Organisation (IMO) resolution MSC.481 (102) Type I and Type II, U.S. Department of Transportation specification USCG 46 CFR, section 164.018, European Marine Equipment Directive (MED) and UK Marine Equipment Regulation.

Product Construction

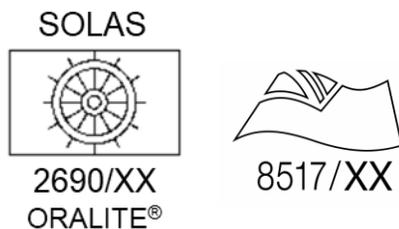
ORALITE® FD 1405 is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The prism surfaces are coated with a vacuum deposition of aluminium to provide a mirror surface to the prism facets. The resulting film is not more than 0,250 mm thick, and comes with an aggressive pressure sensitive adhesive.

Product Approval

IMO resolution MSC.481 (102)

Conformity Mark

ORALITE® FD 1405 carries a permanent ships wheel marking for easy recognition of the approved quality of the material according to the European Marine Equipment Directive (MED). The product is also marked with the Red Ensign in accordance with the UK Marine Equipment Regulation.



NOTE: In place of the XX the last two digits of the year manufactured will be provided

Colour

ORALITE® FD 1405 is available in silver (retroreflection in white). The colour shall be located in the area defined by the chromaticity coordinates provided in Table 1, when measured in accordance with CIE No. 15 and illuminated with the CIE standard illuminant D₆₅ using 45° / 0° or 0° / 45° geometry.

Retroreflectivity

When illuminated with CIE illuminate A and measured with provisions of CIE No. 54 the typical coefficient of retroreflection (RA) of ORALITE® FD 1405 is shown in Table 2.

Adhesive

ORALITE® FD 1405 is supplied with a pressure sensitive adhesive. The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or solvents.

Application Instructions

Please contact ORAFOL for full instructions.

Shelf Life

The product must be used within one year from the shipment date. All rolls including partially used rolls should be stored in original packaging, tightly wound. Store in a clean and dry area, away from direct sunlight. Store at 20° C and 50% relative humidity.

Roll Sizes

ORALITE® FD 1405 is available in 50mm x 45.7m as standard. The product is also available as pre-cut labels kiss-cut to various sizes including:

50mm x 48mm
50mm x 102mm
50mm x 105mm
50mm x 120mm
50mm x 200mm
50mm x 201mm
50mm x 220mm
50mm x 300mm

Table 1
Colour Specification Limits (Daytime)

| Colour | Chromaticity Coordinates* | | | | | | | |
|--------|---------------------------|-------|-------|-------|-------|-------|-------|-------|
| | 1 | | 2 | | 3 | | 4 | |
| | x | y | x | y | x | y | x | y |
| Silver | 0,300 | 0,270 | 0,385 | 0,355 | 0,345 | 0,395 | 0,260 | 0,310 |

*) The four pairs of chromaticity coordinates determine the acceptable chromaticity when measured with standard illuminant D₆₅ using a Hunter LabScan spectrophotometer.

Table 2
Retroreflectivity

| Observation Angle | Entrance Angle ($\beta_1, \beta_2=0$) | | |
|-------------------|---|-----|-----|
| | 5° | 30° | 45° |
| 0,10° | 1000 | 500 | 150 |
| 0,20° | 700 | 400 | 140 |
| 0,50° | 150 | 140 | 80 |
| 1,00° | 20 | 12 | 10 |

All values have units of cd/lux/m².

IMPORTANT NOTICE

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use.

All specifications are subject to change without prior notice.

ORALITE® is a registered trademark of ORAFOL Europe GmbH.

