Description

ORALITE® GP 440 is a tough weather and solvent resistant tape designed to be sewn on to high visibility garments and school bags. The reflectivity exceeds the highest performance level of EN ISO 20471:2013 and the requirements in DIN 58124.

Product Construction

ORALITE® GP 440 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 metallised to protect them from dirt and moisture and covered with a fabric to facilitate sewing.

Product Approvals

EN ISO 20471:2013 Separate Performance DIN 58124 (for school bag application)

Test certificates for garment CE mark acquisition are available upon request.

Film Logo Pattern



Colour

ORALITE® GP 440 is available in silver. ORALITE® GP 440 tape conforms to the colour requirements in Table 2 when measured in accordance with CIE Publication No. 15.2. The four pairs of coordinates determine the acceptable colour when measured with standard illuminant D65 using a Hunter LabScan.

Retroreflectivity

ORALITE[®] GP 440 tapes comply with the minimum reflectivity requirements of EN ISO 20471:2013 separate performance, when tested in accordance with the procedures in EN ISO 20471:2013. *Typical* coefficients of retroreflection for ORALITE[®] GP 440 are provided in Table 1.

Care Instructions

ORALITE® GP 440 when washed in accordance with EN ISO 20471:2013 will withstand a minimum of 100 washings at 60° C when attached to a variety of background materials.



Application Instructions

The user is fully responsible for evaluating the suitability of the tape and the converted product. 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.

Table 1

| Retrorenectivit | У | | | | | | |
|----------------------|---|-----|-----|-----|--|--|--|
| Observation Angle | Entrance Angle (β ₁ , β ₂ =0) | | | | | | |
| | 5° | 20° | 30° | 40° | | | |
| 0,20° | 1000 | 900 | 700 | 375 | | | |
| 0,33° | 400 | 375 | 325 | 250 | | | |
| 1,00° | 35 | 33 | 30 | 20 | | | |
| 1,50° | 10 | 7 | 5 | 4 | | | |

All values have units of cd/lux/m².

Table 2
Colour Specification Limits

| | Chromaticity Coordinates* | | | | | | | | | |
|-----------|---------------------------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Colour | 1 | | 2 | | 3 | | 4 | | | |
| | х | у | х | у | х | у | х | у | | |
| 15 Silver | 0,303 | 0,300 | 0,368 | 0,366 | 0,340 | 0,393 | 0,274 | 0,329 | | |

^{*} The four pairs of chromaticity coordinates determine the acceptable chromaticity on the CIE diagram.

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.

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