

| | | | | | | | | |
|--------------------------------|-------------------|-------------------------------------|-------------------|------------|--------------------------------|------------------------|----------------------|------------|
| OPTICAL GLASS LENS | | H2F Phtochromic glass lenses | | 103 | CUSTOMER | | BARBERINI SPA | |
| H2F Rosa B 9 - AR 99 cc | | | | | TECHNICAL DATA SHEET N. | | HF295 | |
| Base: | 6 | Coating: | AR 99 cc | | | GLASS CODE: | RL0106C0 | |
| Thickness: | 1.9 mm | Polarization Ratio: | 0,00% | (min 4:1) | | DATE: | 16/02/2016 | |
| Hardening: | Chemically | Degree of Polarization: | 0,00 | | | Photochromic Ratio: | PASS 3,12% | (min 1.25) |
| Optical Centre: | Centre | Reflection factor: | PASS 1,47% | (max 2.5%) | | Photochromic Interval: | 0,68 | |

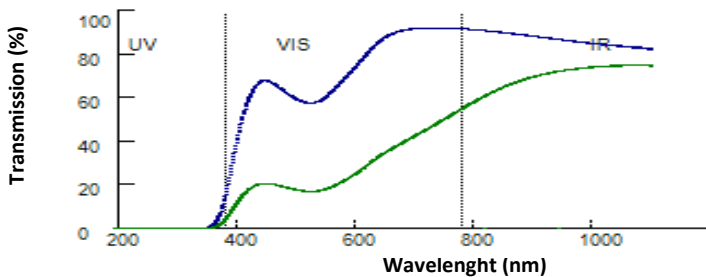
This sunglare filter is conform to the following International Norm:

| | | Light | | | Dark | | |
|--------------|-------------------------|---------------------------|---------------------|---------------------------|---------------------|-------------|--|
| | | Filter Category: 1 | Light tint | Filter Category: 2 | Medium tint | | |
| TV | (mean 380 ÷ 780 nm) | 65,76% | | 21,03% | | | |
| TSB | (mean 380 ÷ 500 nm) | 64,43% | | 19,59% | | | |
| TSIR | (mean 780 ÷ 2000 nm) | | (max TV) | | (max TV) | | |
| TSUV | (mean 280 ÷ 380 nm) | 1,34% | | 0,38% | | | |
| TSUVA | (mean 315 ÷ 380 nm) | 2,08% | (max Tv) 65,76% | PASS 0,59% | (max Tv) 21,03% | PASS | |
| TSUVB | (mean 280 ÷ 315 nm) | 0,01% | (max 0,05 TV) 3,28% | PASS 0,01% | (max 0,05 TV) 1,05% | PASS | |
| TVIS | (peak min 475 ÷ 650 nm) | 57,84% | (min 0,2 Tv) 13,15% | PASS 17,20% | (min 0,2 Tv) 4,20% | PASS | |
| | Qgreen | 0,93 | (min. = 0,60) | PASS 0,89 | (min. = 0,60) | PASS | |
| | Qyellow | 1,07 | (min. = 0,60) | PASS 1,13 | (min. = 0,60) | PASS | |
| | Qred | 1,23 | (min. = 0,80) | PASS 1,42 | (min. = 0,80) | PASS | |
| | Qblue | 0,94 | (min. = 0,60) | PASS 0,92 | (min. = 0,60) | PASS | |

Suitable for driving and road use - Not suitable for driving at night or under condition of dull light

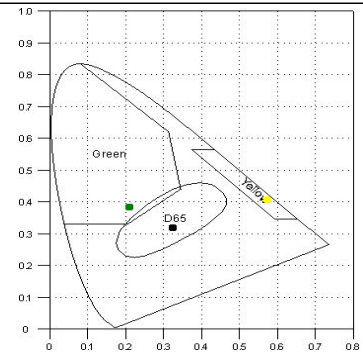
| | | American Norm: ANSI Z80.3-2010 | | | Primary function and shade cosmetic | | |
|--------------|-----------------------------|--------------------------------|---------------------|-------------|-------------------------------------|--------------------------|---------------------|
| TV | (mean 380 ÷ 780 nm) | 65,95% | (40<=Tv<100) | PASS | Light | | |
| TSB | (mean 380 ÷ 500 nm) | 64,43% | | | | | |
| TSUVB | (mean 280 ÷ 315 nm) | | | | Color limits: | | |
| | normal use | 0,01% | (<=1/8Tv) 8,24% | PASS | Chromaticity (D65) | PASS | |
| | high and prolonged exposure | 0,01% | (max 1%) 0,65% | PASS | Yellow traffic signals | x=0,5909 y=0,4080 | PASS |
| TSUVA | (mean 315 ÷ 380 nm) | | | | Green traffic signals | x=0,2150 y=0,3864 | PASS |
| | normal use | 2,97% | (max Tv) 65,95% | PASS | Traffic signal transmittance: | | |
| | high and prolonged exposure | 2,97% | (max 0.5 TV) 32,97% | PASS | Red signal | 85,38% | (>= 8%) PASS |
| TSIR | (mean 780 ÷ 1400 nm) | | Not Calculated | | Yellow signal | 72,00% | (>= 6%) PASS |
| TVIS | (peak min 475 ÷ 650 nm) | 57,85% | (min 0,2 TV) 13,15% | PASS | Green signal | 61,39% | (>= 6%) PASS |

| | | Australian Norm: AS/NZS 1067:2009 | | | Filter Category: 1 | | |
|---------------|-------------------------|-----------------------------------|---------------------|-------------|-----------------------------------|-------------|---------------------------|
| TV | (mean 380 ÷ 780 nm) | 65,76% | | | Limited sunglare reduction | | |
| TSB | (mean 380 ÷ 500 nm) | 64,43% | | | Not Suitable for driving at night | | |
| TSIR | (mean 780 ÷ 2000 nm) | | Not Calculated | | | | |
| TSUV | (mean 280 ÷ 400 nm) | 3,58% | | | Qgreen | 0,92 | (min. = 0,60) PASS |
| TSUVA | (mean 315 ÷ 400 nm) | 5,33% | (max Tv) 65,76% | PASS | Qyellow | 1,09 | (min. = 0,80) PASS |
| TSUVB | (mean 280 ÷ 315 nm) | 0,01% | (max Tv) 3,28% | PASS | Qred | 1,22 | (min. = 0,80) PASS |
| TSUVB1 | (peak max 315 ÷ 350 nm) | 0,69% | (max Tv) 65,76% | PASS | Qblue | 0,96 | (min. = 0,70) PASS |
| TVIS | (peak min 450 ÷ 650 nm) | 57,84% | (min 0,2 Tv) 13,15% | PASS | | | |



D65 : x=0,3335
y=0,3212

C : x=0,3305
y=0,3096



Spectral Data:

| UV | | | | VIS | | | | | | | | IR | | | |
|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|------|-------|------|------|
| nm | % | nm | % | nm | % | nm | % | nm | % | nm | % | nm | % | nm | % |
| 200 | 0,01 | 300 | 0,01 | 390 | 30,21 | 490 | 60,94 | 590 | 71,91 | 690 | 91,68 | 800 | 91,53 | 1300 | 0,00 |
| 210 | 0,01 | 310 | 0,01 | 400 | 43,13 | 500 | 59,43 | 600 | 74,82 | 700 | 91,97 | 850 | 90,17 | 1400 | 0,00 |
| 220 | 0,01 | 320 | 0,01 | 410 | 53,49 | 510 | 58,37 | 610 | 77,93 | 710 | 92,19 | 900 | 88,55 | 1500 | 0,00 |
| 230 | 0,01 | 330 | 0,03 | 420 | 60,89 | 520 | 57,85 | 620 | 81,08 | 720 | 92,32 | 950 | 86,81 | 1600 | 0,00 |
| 240 | 0,01 | 340 | 0,13 | 430 | 65,55 | 530 | 58,04 | 630 | 83,92 | 730 | 92,37 | 1000 | 85,31 | 1700 | 0,00 |
| 250 | 0,01 | 350 | 0,69 | 440 | 67,81 | 540 | 59,07 | 640 | 86,35 | 740 | 92,38 | 1050 | 83,91 | 1800 | 0,00 |
| 260 | 0,01 | 360 | 2,58 | 450 | 67,98 | 550 | 60,93 | 650 | 88,25 | 750 | 92,34 | 1100 | 82,54 | 1900 | 0,00 |
| 270 | 0,01 | 370 | 7,46 | 460 | 66,66 | 560 | 63,49 | 660 | 89,58 | 760 | 92,27 | 1150 | 0,00 | 2000 | 0,00 |
| 280 | 0,01 | 380 | 17,13 | 470 | 64,73 | 570 | 66,33 | 670 | 90,55 | 770 | 92,12 | 1200 | 0,00 | | |
| 290 | 0,01 | | | 480 | 62,74 | 580 | 69,17 | 680 | 91,21 | 780 | 91,93 | | | | |

Data subject to change without notice

De Luca Alfonso
Responsible Alfonso De Luca