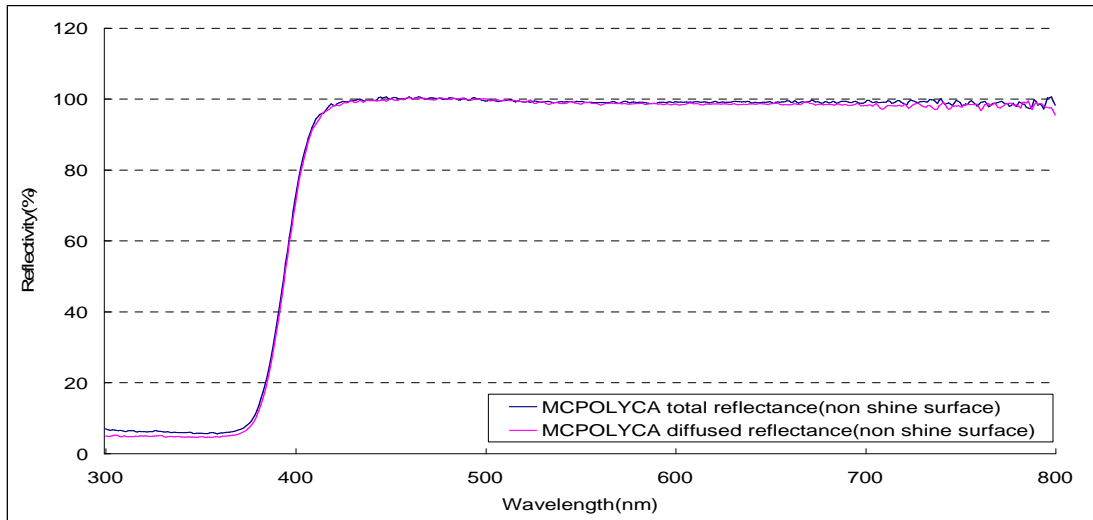


Furukawa - Microcellular Reflective Sheet

MCPOLYCA

*Thickness
- 1.00mm

*Reflective Performance at 550nm
- 98% in total and 98% in diffuse.



*Processing method
Molding - Vaccum molding will be recommended.

| | | | | |
|----------|--|----------------------|----|------------------|
| Overview | Thickness | | mm | 1.00 |
| | ¹⁾ Reflectivity | Total Reflectivity | % | 98 |
| | | Diffuse Reflectivity | % | 98 |
| | ²⁾ Surface specific resistivity | | Ω | 10 ¹⁶ |
| | Processing | Cutting | | fine |
| | | Molding | | fine |

Note1) Reflectivity is relative against barium sulfate at 550nm.
Note2) No use by open space due to low antistatic performance.

MCPOLYCA

| Base material | | | Polycarbonate | | | |
|---------------------------|---------------------------------|------------------------------|------------------|-------------|----------------------|---------------------------------------|
| Thickness | | | mm | 1.00(±0.10) | | |
| Properties | Test item | | Direction | Unit | Value | Test standard |
| | Density | | - | kg/m3 | 400 | JIS K 6767 |
| | Optical properties | Total | - | % | 98 | Relative value against BaS04 at 550nm |
| | | Diffuse | - | % | 98 | |
| | Mechanical properties | Tensile strength | MD | Mpa | 19 | JIS K 6767 |
| | | | TD | | 18 | |
| | | Elongation | MD | % | 46 | JIS K 6767 |
| | | | TD | | 47 | |
| | | Tear strength | MD | Mpa | 56 | JIS K 6767 |
| | | | TD | | 54 | |
| | | Flexural Strength | MD | Mpa | 15 | JIS K 7171 |
| | | | TD | | 14 | |
| | Flexural Modulus | MD | Mpa | 729 | JIS K 7171 | |
| | | TD | | 699 | | |
| | Electrical properties | Surface specific resistivity | | Ω | 10 ¹⁶ | JIS K 6911 |
| Thermal properties | Ave. linear expansion (30-70°C) | MD | °C ⁻¹ | 6.1X10-5 | JIS K 7197 (30-70°C) | |
| | | TD | | 6.0X10-5 | | |
| | Thermal deformation | MD | 100°C, 24hrs | -0.3 | JIS K 6767 | |
| | | TD | | -0.2 | | |
| Reliability | Test item | | Condition | Time | Item | Value |
| | Default value | | - | - | Total reflectance | 99 |
| | | | | | L | 99 |
| | | | | | a* | 0.1 |
| | | | | | b* | 0.6 |
| | High Temperature | | 80°C | 1000hrs | Total reflectance | 99 |
| | | | | | ²⁾ ΔE | 0.2 |
| | Low Temperature | | -20°C | 1000hrs | Total reflectance | 99 |
| | | | | | ²⁾ ΔE | 0.1 |
| | High humidity - temperature | | 60°CX95%RH | 1000hrs | Total reflectance | 99 |
| | | | | | ²⁾ ΔE | 0.4 |
| | Heat cycle test | | -30°C⇄80°C | 500cycle | Total reflectance | 99 |
| ²⁾ ΔE | | | | | 0.3 | |
| Environmental suitability | RoHS complianced | | | | | |
| | Halogen free | | | | | |
| | Recyclable | | | | | |
| Sheet size | 700X1500 | | | | | |

*All the data on this page is not guaranteed, just for the reference.

*1)Thickness of MCPOLYCA may change in some circumstances.

*2)ΔE shows color changes and be calculated by means of the following formula.

$$dE = \sqrt{(L_1 - L_0)^2 + (a_1 - a_0)^2 + (b_1 - b_0)^2} \quad L_0, a_0, b_0 = \text{default value}, L_1, a_1, b_1 = \text{after test}$$