Optical Data Sheet YMDS-874

SUMITOMO METAL MINING

IR-Shielding Dispersion Powder

Grade ： YMDS-874

<Composition>

Material	wt%
Cesium tungsten bronze	23.0
Organic dispersing agent / Others	77.0

Optical measurement procedure

<Preparation of IR-Shielding PC Plates>

Master-Batch pellets are manufactured from a mixture composed of 6.52wt% YMDS-874 powder and 93.48wt% clear polycarbonate powder by melting at 290℃.
One part Master-Batch pellets are mixed with 49 parts clear polycarbonate pellets, and coextruded at 290℃ in an extruder to be cast into PC plates of 2mm and 3mm thickness.

Optical properties

Thickness(mm)	VLT / %	ST / %	Haze / %
3	70.3	36.7	1.4
2	76.2	45.4	1.0

VLT: Visible light transmittance, ST: solar transmittance

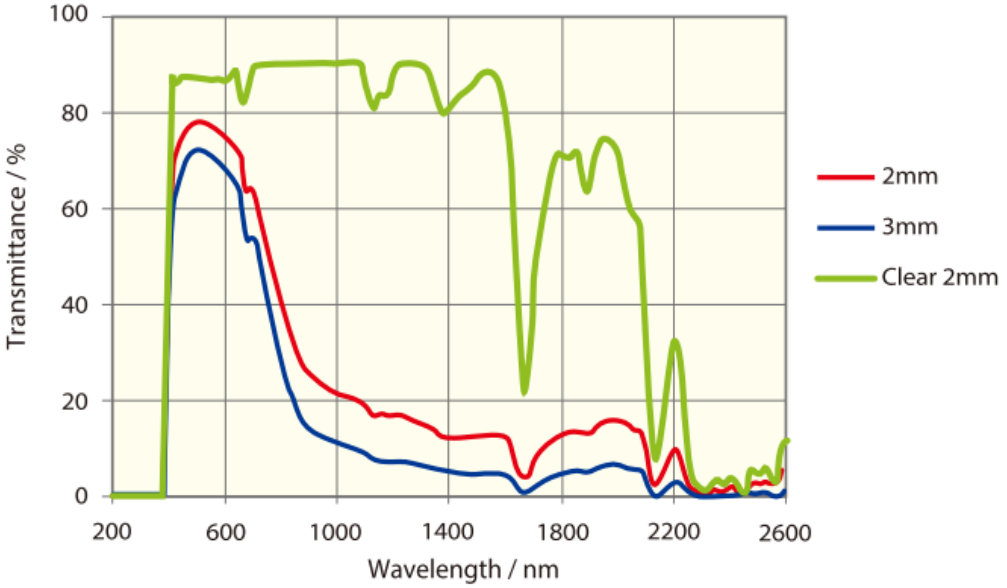


Fig.1 Transmittance profiles of polycarbonate plates using YMDS-874