

ABSTRACT

A single-crystal diamond material has a transmittance of light with a wavelength of greater than or equal to 410 nm and less than or equal to 750 nm of less than or equal to 15% for any wavelength, and is at least either of an electrical insulator according to optical evaluation and an electrical insulator according to electrical evaluation. A criterion of the optical evaluation can be a transmittance of light with a wavelength of 10.6 μm of greater than or equal to 1%. A criterion of the electrical evaluation can be an average resistivity of greater than or equal to $1 \times 10^6 \Omega\text{cm}$. Accordingly, a single-crystal diamond material having a low transmittance of light in the entire region of the visible light region and exhibiting a black color is provided.