Neodymium(III) oxide or neodymium sesquioxide is the chemical compound composed of neodymium and oxygen with the formula Nd₂O₃. Used in ceramic capacitors, color TV tubes, high temperature glazes, coloring glass, carbon-arc-light electrodes, and vacuum deposition. Neodymium(III) oxide is also used as a polymerization catalyst. d₂O₃ powder is utilized as additives for coloring and enhancing the optical properties of glasses. It is also used as an effective semiconductor material in diodes, as components for high temperature ceramics and superconductors.