

Oxide Materials

For Optical Coating Deposition

Materion offers complete reproducibility to ensure consistent high performance of oxide compounds. Our integrated technologies and manufacturing capabilities allow us to provide the materials you need.

Global Manufacturing Process

Custom oxide compositions manufactured to your specifications provide high yield and less down time.

- Oxide Synthesis
- Controlled Atmosphere Handling
- Chemical Analysis
- Custom Particle Sizing

Benefits

We offer a full range of inorganic oxide optical coating materials suited for a variety of applications.

- Available forms: granules, pellets and powders
- Various high purity levels
- Supporting various optical wavelength ranges from UV to far IR

Oxide Materials for Optical Coating Deposition*

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| • Aluminum Oxide, Al ₂ O ₃ | • Iron Oxide, Fe ₂ O ₃ | • Silicon Monoxide, SiO |
| • Antimony Oxide, Sb ₂ O ₃ | • Lanthanum Oxide, La ₂ O ₃ | • Strontium Oxide, SrO |
| • Barium Titanate, BaTiO ₃ | • Lead Titanate, PbTiO ₃ | • Tantalum Oxide, Ta ₂ O ₅ |
| • Bismuth Oxide, Bi ₂ O ₃ | • Lutetium Oxide, Lu ₂ O ₃ | • Terbium Oxide, Tb ₄ O ₇ |
| • Boron Oxide, B ₂ O ₃ | • Lithium Manganese Oxide, LiMn ₂ O ₄ | • Tin Oxide, SnO ₂ |
| • Calcium Oxide, CaO | • Magnesium-Aluminum Oxide (spinel) | • Titanium Dioxide, TiO ₂ |
| • Cerium Oxide, CeO ₂ | • Magnesium-Aluminum-Zirconium Oxide (spinel) | • Titanium Monoxide, TiO |
| • Chromium Oxide, Cr ₂ O ₃ | • Magnesium Oxide, MgO | • Tungsten Oxide, WO ₃ |
| • Dysprosium Oxide, Dy ₂ O ₃ | • Molybdenum Oxide, MoO ₃ | • Ytterbium Oxide, Yb ₂ O ₃ |
| • Europium Oxide, Eu ₂ O ₃ | • Neodymium Oxide, Nd ₂ O ₃ | • Yttrium Oxide, Y ₂ O ₃ |
| • Gadolinium Oxide, Gd ₂ O ₃ | • Niobium Oxide, Nb ₂ O ₅ | • Zinc Oxide, ZnO |
| • Gallium Oxide, Ga ₂ O ₃ | • Praseodymium Oxide, Pr ₂ O ₃ | • Zirconium Oxide, ZrO ₂ |
| • Germanium Oxide, GeO ₂ | • Scandium Oxide, Sc ₂ O ₃ | • Zirconium Oxide-Magnesium Oxide, ZrO ₂ -xMgO |
| • Hafnium Oxide, HfO ₂ | • Silicon Dioxide, SiO ₂ | • Zirconium Oxide-Titanium Oxide, ZrO ₂ -xTiO ₂ |
| • Indium Oxide, In ₂ O ₃ | | |
| • Indium-Tin Oxide, 90In ₂ O ₃ -10SnO ₂ (wt%) | | |

*Additional custom oxide compositions are available upon request