Lithium Cobalt Oxide
LiCoO$_2$

Sputtering Targets

Applications
- Cathode layer in rechargeable thin film batteries

Features
- High density
- Stoichiometric
- Electrically conductive at room temperature
- Phase pure
- Homogenous

Manufacturing Process
- In-house powder synthesis
  - High purity metal oxide precursor materials
  - High energy mixing
  - Particle sizing processes
- Multiple step densification
  - Proprietary processes employed for pressing and sintering
- Cleaning and final packaging
  - Cleaned for use in vacuum
  - Protection from environmental contaminants
  - Protection during shipment

Options
- 99.9% purity
- Custom compositions may be available upon request
- Circular targets up to 12” (300 mm) diameter
- Planar tiles up to 8” (250 mm) X 5” (125 mm) for larger target configurations
- Smaller sizes also available for R&D applications
- Sputtering target bonding service

www.lesker.com
X-Ray Diffraction Pattern of Sintered LiCoO₂ Sputtering Target

Specifications

Typical Analysis - 99.9% (3N) Purity
Metallic Impurities, ppm by weight

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<th></th>
<th>Al</th>
<th>Ca</th>
<th>Cr</th>
<th>Cu</th>
<th>Fe</th>
<th>Mg</th>
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Theoretical Density 5.03 g/cm³
Relative Density 4.62 g/cm³ minimum
Appearance Dark gray to black

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