

# Lithium Cobalt Oxide

**Stock No.**  
NS6130-02-286

Currently, the most popular lithium-ion technology is the lithium-cobalt oxide (LCO) battery which has a cathode composed of  $\text{LiCoO}_2$ . The main feature of the LCO battery is the high energy density translating into a long run-time for portable devices such as cell phones, tablets, laptops and cameras. The cathode material contains 60% cobalt and accounts for 50% of the weight of the cathode.

Lithium-ion cobalt batteries, lithium cobalt oxide batteries are made from lithium carbonate and cobalt. Due to their very high specific energy, these batteries are used for cell phones, laptops and electronic cameras. They have a cobalt oxide cathode and use graphite carbon as their anode material; during discharge, lithium ions move from anode to cathode, with the flow reversing when the battery is charging.



## QUICK Facts

✓ Molecular Formula	:	$\text{LiCoO}_2$
✓ CAS	:	12190-79-3
✓ Molecular Weight	:	97.87 g/mol
✓ Tap Density	:	0.2~0.5m <sup>2</sup> /g
✓ Moisture	:	≤0.1%
✓ pH	:	9~11
✓ Foam	:	Powder
✓ Appearance	:	Gray/Black

## ADVANTAGES of Lithium Cobalt Oxide:

- ✓ High energy density
- ✓ Large number of mechanical cell sizes available
- ✓ High voltage
- ✓ Active development - significant investment into further improvements
- ✓ No memory effect
- ✓ Very low rate of self discharge



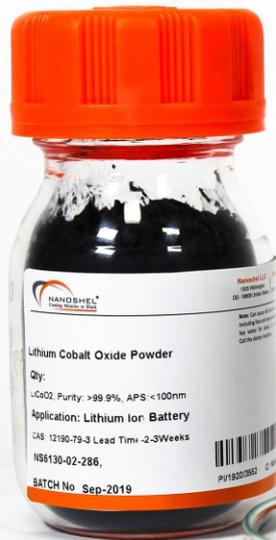
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## CHARACTERISTICS

- ✓ Long life expectancy and long operational life.
- ✓ Low self discharge rate
- ✓ High energy density
- ✓ High cell voltage
- ✓ Wide temperature range
- ✓ High operating Safety
- ✓ High reliability
- ✓ Resistance to corrosion



## APPLICATIONS

- ✓ Cathode material
- ✓ Critical substance in the quest for high performance, advanced batteries
- ✓ Used in portable music devices
- ✓ Use in rechargeable batteries
- ✓ Used in electric cars
- ✓ Hybrid vehicles
- ✓ Electric motorcycles and scooters
- ✓ Electric bicycles
- ✓ Personal transporters and advanced electric wheelchairs
- ✓ Used in telecommunications

## PACKING SIZES :

25Gms, 50Gms, 100Gms, 500Gms, 1Kg & Bulk Orders



ISO 9001:2015  
CERTIFIED COMPANY

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