



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 04-01-03

CHEMICAL IDENTITY

LABEL IDENTITY	LITHIUM COBALT OXIDE
CHEMICAL NAME/SYNONYMS	LITHIUM COBALT OXIDE
FORMULA	LiCoO₂
Lithium Oxide	Cobalt Oxide
Weight %: 16.62%	Weight %: 83.38%
CAS Number: 12057-24-8	CAS Number: 1308-06-1
ACGIH/TLV: N/A	ACGIH/TLV: 0.02 mg/m ³
OSHA/PEL: N/A	OSHA/PEL: 0.1 mg/m ³

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Black, Powder, Odorless
DENSITY (gm/cc)	N/A
VAPOR PRESSURE @ 20°	N/A
MELTING POINT	N/A
BOILING POINT	N/A
WATER SOLUBILITY	Insoluble

FIRE, EXPLOSION & PHYSICAL HAZARD DATA

FLASH POINT	N/A
INFLAMMABILITY	N/A
IGNITION TEMP	N/A
FLAMMABLE LIMITS	N/A
REACTIVITY DATA:	Airborne dust particles, especially metal dust, and accumulation of such should be treated as explosives. To minimize danger from dust explosions, adequate ventilation should be provided to spray booth in accordance with American Welding Society publication AWSC2.1-73, and ACGIH publication "Industrial Ventilation".

Decomposition will not occur if used and stored according to specifications. Avoid acids, water/moisture.

SPECIAL FIRE FIGHTING PROCEDURES: Use fire fighting measures that suit the surrounding fire. Do not use water or carbon dioxide as extinguishing agent.



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FIRST AID MEASURES

Skin:	Wash thoroughly with soap and water.
Eye:	Flush thoroughly with plenty of water. If discomfort persists, seek medical attention.
Inhaled:	Remove to fresh air and give artificial respiration if not breathing. Oxygen may be given if necessary. Call a physician.
Swallowed:	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

The hazards of this material are mainly due to its sensitizing and mild irritating properties. There are no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear protective clothing to protect against hazards such as overexposure to skin, eyes, and respiratory tract. Collect all material which may be released, into containers, label, and hold for proper disposal per local, state, and federal regulations.

WASTE DISPOSAL METHOD: Collect material into containers for recycle or reuse. Do not throw in trash or place in landfill. Refer to governmental and regional requirements.

SPECIAL PROTECTION AND PRECAUTIONS

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection:	If exposure limits exceed TLV, wear respirator selected per OSHA 1910.134, and OSHA 29 CFR.
Hand Protection:	Gloves Recommended.
Eye Protection:	Splash goggles, safety glasses, or face shields Recommended.
Body Protection:	An apron, or other impermeable body protection suggested. Wash any contaminated clothing before reuse.

SAFE HANDLING, USE AND STORAGE: Local dust pickup recommended for open flowing powdered products. Wear personal protective equipment to protect health if TLV is exceeded while handling product. Store material in a dry location with adequate support for the weight of the product. Use caution when lifting product cartons not to strain your back muscles. Store material away from ignition sources which could catch packaging materials on fire.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any other process. The information set forth herein is based on technical data that **Angstrom Sciences** believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under a recommendation to infringe any patents. Any use of this data and information must be determined by the user to be in accordance with Federal, State and Local laws and regulations.