



SAFETY DATA SHEET (SDS)

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1 - Product and Company Identification

Trade Name: CEC FLUORESCENT LAMPS

Manufacturer: CEC INDUSTRIES LTD 599 BOND STREET LINCOLNSHIRE, IL 60069 USA.
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Section 2 - Hazards Identification

THERE ARE NO KNOWN HEALTH HAZARDS FROM EXPOSURE TO LAMPS THAT ARE INTACT. No adverse effects are expected from occasional exposure to broken lamps. As a matter of good practice, avoid prolonged or frequent exposure to broken lamps unless there is adequate ventilation. The major hazard from broken lamps is the possibility of sustaining glass cuts.

NIOSH/OSHA *Occupational Health guide lines for Chemical Hazards and/or NIOSH Pocket Guide to Chemical Hazards* list the following effects of overexposure to the chemical/materials tabulated below when they are inhaled, ingested or contacted with skin or eye:

Mercury – Contact, inhalation, or ingestion may cause one or more of the following symptoms: eye irritation, skin irritation, cough, chest pain, bronchitis, tremor, insomnia, irritability, indecision, headache, fatigue, weakness, salivation, GI tract disturbance, anorexia, and weight loss.

Lead – Contact, ingestion, or inhalation may cause one or more of the following symptoms: weakness, lassitude, insomnia, pal eye, anorexia, weight loss, malnutrition, constipation, abdominal pain, colic, anemia, gingival head line, tremor, wrist paralysis, ankles paralysis, encephalopathy, kidney disease, eye irritation, and hypotension.

Glass – Glass dust is considered to physiologically inert and as such has an OSHA exposure limit of 15 mg /M3 for total dust and 5 mg/M3 for respiratory dust. The ACGIH TLV for particulates not otherwise classified are 10 mg/M3 for total dust and 3 mg/M3 for respiratory dust

Tin – Contact, ingestion, or inhalation may cause one or more of the following symptoms: eye irritation, skin

irritation, and respiratory system irritation.

Manganese – Contact, ingestion, or inhalation may cause one or more of the following symptoms: Parkinson's, asthenia, insomnia, mental confusion, metal fume fever, dry throat, cough, chest tightness, flu-like fever, low-back pain, vomiting, malaise, fatigue, and kidney damage. Fluoride – Fluoride-containing dust may irritate the eyes and respiratory tract. Swallowing fluoride may cause a salty or soapy taste, vomiting, abdominal pain, diarrhea, shortness of breath, difficulty in speaking, thirst, weakness of the pulse, disturbed color vision, muscular weakness, convulsions, loss of consciousness. Kidney injury and bleeding from the stomach may occur. Repeated exposure to fluoride may cause excessive calcification of the bone and calcification of ligaments of the ribs, pelvis, and spinal column. Stiffness and limitation of motion may result. Repeated or prolonged exposure of the skin to fluoride-containing dust may cause a skin rash.

Aluminum Oxide – Alumina is a non-toxic material. Sharp-edged particles can irritate the eyes, skin and respiratory system.

Phosphor – Phosphor dust is considered to be physiologically inert and as such has an OSHA exposure limit of 15 mg/cubic meter for total dust and 5 mg/cubic meter for respiratory dust.

Yttrium – Contact, ingestion, or inhalation may cause one or more of the following symptoms: eye irritation, pulmonary irritation, and possible liver damage.

Barium – Contact, ingestion, or inhalation may cause one or more of the following symptoms: eye irritation, skin irritation, upper respiratory system irritation, skin burns, gastroenteritis, muscle spasm, slow pulse, and extra systole.

Tungsten – Contact, ingestion, or inhalation may cause one or more of the following symptoms: eye irritation, respiratory system irritation, diffuse pulmonary fibrosis, and loss of appetite, nausea, cough, and blood changes.

Antimony – Contact, ingestion, or inhalation may cause one or more of the following symptoms: eye irritation, nose irritation, throat irritation, mouth irritation, cough, dizziness, headache, nausea, vomiting, diarrhea, stomach cramps, insomnia, anorexia, and unable to smell properly.

Section 3 -Composition/Information on ingredients

Chemical Name	CAS Number	% by wt	(Exposure Limits in Air (mg/cubic m))	
			ACCIH/TLV	OSHA/PEL
Glass (Soda-Lime)	----	75 – 90	10	15
Mercury (SARA 313) (Cercla)	7439-97-6	0.0002 - 0.02	10	15
Lead Oxide	1317-36-8	0.2 - 2.0	0.025	0.1 Ceiling
Aluminum Oxide	001-344-281	0 - 2.0	0.05	0.05
Fluorescent Phosphor & Cathodes may contain		0.5 - 3.0	10	15
Fluoride		0 - 0.1	2.5	2.5
Manganese (as dust)	7439-96-5	0 - 0.1	0.2	5.0 Ceiling
Tin (as Dust)	7440-31-5	0 - 0.1	2	2
Yttrium (as dust)	7440-65-5	0 - 0.5	1	1
Barium (as dust)	7440-39-3	<0.1	0.5	0.5
Tungsten (as dust)	7440-33-7	<0.1	1	15
Strontium (as dust)	7440-24-6	0 - 0.1	10	15
Magnesium (as dust)	7439-95-4	0 - 0.1	0.2	5.0 Ceiling
Calcium (as dust)	----	0 - 0.1	10	15
Antimony (as dust)	7440-36-0	0 - 0.1	10	15
Zinc (as dust)	7440-66-6	0 - 0.1	10	15
Europium (as dust)	7440-53-1	0 - 0.1	10	15
Cerium (as dust)	7440-45-1	0 - 0.1	10	15
Lanthanum (as dust)	7439-91-0	0 - 0.1	10	15
Terbium (as dust)	7440-27-9	0 - 0.1	10	15
Aluminum (as dust)	7429-90-5	0 - 0.1	10	15

(1) These chemicals are subject to the reporting requirements of section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372

(2) Limits as nuisance particulate.

(3) These elements are contained in the material as part of its chemical structure; the material is not a mixture

(4) The mercury and lead in this product are substances known to the state of California to cause reproductive toxicity if ingested [California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)] There are no known health hazards from lamps that are intact.

Materials listed on this data sheet are contained in varying percentages in this product. Exact percentages are proprietary and will not be disclosed other as required in Accordance with the regulations.

Section 4 - First AID Measures

First AID:

Inhalation: If discomfort, irritation or symptoms of pulmonary involvement develop, remove from exposure and seek medical attention as need.

Ingestion: In the unlikely event of ingesting a large quantity of material, seek medical attention immediately.

Skin Contact: Thoroughly wash affected area with mild soap or detergent and water and prevent further contact. Seek medical attention as need.

Eye Contact: Wash eyes, including under eyelids, immediately with copious amounts of water for 15 minutes. Seek medical attention as need.

Section 5 - Fire-Fighting Measures

Fire Extinguishing Materials: Water, water fog, dry chemical, foam. Use extinguishing agents suitable for surrounding fire.

Special Firefighting Procedure: Use a self-contained breathing apparatus to prevent inhalation of dust and/or fumes that may be generate from material during firefighting activities.

Unusual Fire & Explosion Hazards: During a fire irritating & toxic gases & aerosol may be generated by thermal decomposition & combustion.

Section 6 - Accidental release measures

Step to be taken in case material is released or spilled: If molten, allow material to cool down and place into an appropriate marked container for disposal.

Section 7 - Handling and Storage

Spill Release Procedures: NORMAL PRECAUTIONS SHOULD BE TAKEN FOR COLLECTION OF BROKEN GLASS.

.Waste Disposal Methods: UNDER NEW TOXICITY CHARACTERISTIC LEACHING PROCEDURES (TCLP) PROMULGATED BY US ENVIRONMENTAL PROTECTION AGENCY (EPA), TESTS OF USED/SPENT FLUORESCENT, INCANDESCENT, & HIGH INTENSITY DISCHARGE LAMPS INDICATE THAT SOME TYPES OF THESE (SUPDAT)

Handling And Storage Precautions: APPROPRIATE HAND AND EYE PROTECTION SHOULD BE WORN WHEN DISPOSING OF LAMPS OR HANDLING BROKEN GLASS. Other Precautions: NONE SPECIFIED BY MANUFACTURER.

Section 8 - Exposure Control/Personal Protection

Hand Protection: OSHA Specified cut and puncture-resistant gloves are recommended.

Eye Protection: Safety glasses with side shields are recommended.

Skin and Body Protection: No specified skin protection requirements during normal handling and use.

Additional Protective Measures: After handling the material, wash hand and face thoroughly before eating, drinking, smoking or handling tobacco products, applying cosmetics or using toilet facilities.

Section 9 - Physical and chemical properties

Appearance and Odor: THIS IS A GLASS TUBE AND METAL BASE OR PLASTIC BASE.

Section 10 - Stability and Reactivity

Stability: Stable Conditions to avoid: None for intact lamps Incompatibility (materials to avoid): None for intact lamps Hazardous decomposition products (including combustion products): None for intact lamps Hazardous polymerization products: Will not occur.

Section 11 - Toxicological Information

No specific toxicological information is available.

Section 12 - Ecological Information

No specific ecological information is available.

Section 13 - Disposal considerations

CEC Industries Ltd recommends that all mercury – containing lamps be recycled. Obtain *for a list of lamp recyclers and state regulatory disposal information, log onto www.lamprecycle.org.*

If lamps are broken, ventilate area where breakage occurred. Clean-up with a special mercury vacuum cleaner (not a standard vacuum cleaner) or other suitable, means that avoid dust and mercury vapor generation. Take usual precautions for collection of broken glass. Clean-up requires special care due to mercury droplet proliferation. Place materials in closed container to avoid generating dust. It is the responsibility of the waste generator to ensure proper classification and disposal of waste products. To that end, TCLP tests should be conducted on all waste products, including this one, to determine the ultimate disposition in accordance with applicable federal, state and local regulations. Some states have specific disposal requirements for lamps containing mercury. Lamps which pass the EPA's TCLP test are considered non-hazardous waste in most states. Always review your local and state regulations which can vary.

Section 14 - Transportation information

Land transport (DOT) Non-Regulated list under US Department of Transportation.

Sea transport (IMDG)
Non-Regulated

Air transport (ICAO/IATA)
Non-Regulated

Section 15 - Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Hazardous when glass tube broken.

US Toxic Substances Control Act: Listed on the TSCA Inventory.

US.EPA CERCLA Hazardous Substances (40 CFR 302)

Components

None

SARA Section 311/312 Hazard Categories: Non-hazardous under Section 311/312.

US.EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA

Title III Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A):

Components

None

US.EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA

Title III Section 313 Toxic Chemical (40 CFR 372.65)-Supplier Notification Required:

Components

None

Section 16- Other Information

CEC Industries, Ltd believes that the information contained herein is accurate as of the date hereof. HOWEVER, NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREIN AS TO THE INFORMATION PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. The health and safety precautions contained herein may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. Nothing contained herein shall be construed as a license for the use of any product in a manner that would infringe existing patents.

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