

Material Safety Data Sheet



Philips Lighting Company
 A Division of Philips Electronics
 North America Corporation
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Section 1: Product and Company Identification

Product Identifier Alkali Lead Glass		Product Identification No. (Pin) 0291
Emergency Telephone No. (732) 563-3197 Safety and Compliance	Other Information Calls: (859) 236-3100 Environmental Manager	

Section 2: Composition/ Information on Ingredients

Hazardous Ingredients	CAS No.	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	ACGIH STEL/C mg/m ³	%	Critical Effects
Alkali lead glass	N/A	5*	3*	NA	100	
Lead, inorganic**	7439-92-1	0.05	0.05	NA	<20	ACGIH A3 IARC 2B
Silica, crystalline (quartz)	14808-60-7	0.1	0.05	NA	30-40%	pulmonary fibrosis; silicosis; IARC 1

* Permissible exposure limit for respirable particulates during manufacturing.

** Contains 20% inorganic lead bound in a refractory matrix.

OSHA Regulatory Status: 40 CFR 1910.1025 (Lead); 29 CFR 1910.1200 (silica);

Section 3: Physical Data/ Hazards Identification

Physical State Solid	Odor and Appearance Clear glass or particulate, and odorless		Odor Threshold (ppm) NA
Vapor Pressure (mmHg) Not volatile	Vapor Density Not volatile	Evap. Rate NA	Boiling Point (°C) NA
pH NA	Specific Gravity (H₂O = 1) Approximately 3.0	Coeff. Water/Oil Dist. Insoluble	% Volatile Not volatile

Section 4: First Aid Measures

First Aid Procedures:

Inhalation: Immediately remove to fresh air. Seek medical attention. If breathing stops, apply artificial respiration.

Eyes: Flush with water for at least fifteen minutes while holding eyelids open. If irritation persists, seek medical attention. If glass slivers contact eyes, seek medical attention immediately.

Skin: Remove contaminated clothing. Wash with soap and water. If irritation persists, seek medical attention.

Ingestion: Immediately seek medical attention.

Note to Physician: In cases of suspected overexposure (to dust) or lead poisoning, refer to ACGIH BEI test protocol for lead in blood.

NA = not applicable

Section 5: Fire & Explosion Data

Flammability No		If yes, under what conditions?	
Extinguishing Media Use extinguishing media suitable for surrounding fire.		Class NA	
Flashpoint (°C) and Method Nonflammable		Upper Flammable Limit Nonflammable	Lower Flammable Limit Nonflammable
Autoignition Temperature (°C) NA		Hazardous Combustion Products NA	
Explosion Data NA	PPE NA	Sensitivity to Static Discharge NA	
NFPA Data		Firefighting Procedure At extremely high temperatures, may emit lead or lead oxide fumes.	

Section 6: Accidental Release Measures

Avoid dust generation. Do not dry sweep dust.
Use vacuum equipped with HEPA filters for cleanup.
Ensure area is ventilated.

Section 7: Handling and Storage

Handling
If in dust form, treat as lead- and silica- containing dust.
Impact may cause breakage. Handle with care. Sharp edges may cause cuts.

Storage
Keep away from strong oxidizers, hydrogen peroxide and acids (especially hydrofluoric acid).

Section 8: Personal Protection/ Exposure Controls

Respiratory Protection: Precautions should be taken to minimize exposure to dust. Wear NIOSH-approved N100 or P100 particulate respirator for dust exposure.

Protective clothing: Wear nitrile gloves when handling dust. Wear cotton gloves when handling glass.

Eye: Safety glasses/goggles for cutting, grinding, polishing glass or heavy dust conditions.

Ventilation: Local exhaust and mechanical ventilation, as required, to reduce exposure levels.

Hygienic Practices: After handling glass or dust, wash hands thoroughly with soap and water before eating, drinking, smoking or using toilet facilities.

Section 9: Chemical Properties

Melting point: 1400°C. - 1600°C. (2552°F. - 2912°F.)
Softening Point: 625°C. - 640°C. (1157°F. - 1184°F.)

Section 10: Stability and Reactivity

Materials to avoid: Strong oxidizers, hydrogen peroxide, and acids (especially hydrofluoric acid).
Stability: Stable
Lead or lead oxide fumes may result at extreme temperatures.

NA = not applicable

Section 11: Toxicological Information

LD ₅₀ of Ingredients (Specific Species and Route)	LC ₅₀ of Ingredients (Specify Species)	Carcinogenicity (of product): NTP: no IARC: no OSHA: no
Not given for product as a whole	Not given for product as a whole	
TCLo= 10ug/m ³ human inhalation (lead)	TCLo= 450 mg/kg human oral (lead)	

Acute Health Effects: Sharp edges of glass may cut skin and eyes. Glass in solid form is not toxic. Grinding, cutting, polishing or other processing may generate dusts which can irritate the eyes, skin, and respiratory tract. Primary inhalation effects a

Chronic Health Effects: Long-term exposure to glass dust can cause scar tissue to form in lungs. Severe exposure may also cause reduced visibility, skin irritation, mucous membrane irritation, and decreased pulmonary function.

Lead: Inhalation and ingestion of lead compounds can damage blood cells and nervous system. Can cause headache, insomnia, dizziness, and anemia. Can cause skin and eye irritation. High exposures can cause reproductive effects.

Silica (crystalline): High concentrations of dust may cause coughing and mild temporary irritation following short-term exposures. Prolonged or repeated exposure to fine airborne crystalline silica dust may cause severe scarring of the lungs or disease ca

Section 12: Ecological Information

No data.

Section 13: Disposal Considerations

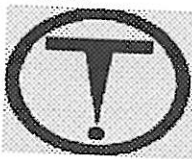
Discard any product, residue, disposal container or liner in accordance with all Federal, State and Provincial Regulations.

Section 14: Transport Information

TDG: NA

DOT: NA

Section 15: Regulatory Information

WHMIS 	Class	Provincial Regulations	EPA
	D2A + D2B	Lead and silica have specific regulations in Canada in the provinces of Alberta, B.C., Manitoba, Ontario and Saskatchewan.	40 CFR Part 372
			OSHA 29 CFR 1910.1025 - General Industry Lead Standard

Section 16: Other Information/Comments

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulations) and the MSDS contains all the information required by the CPR.

Comments:

- Respirable particulate mass TLVs are for those materials that are hazardous when deposited in the human respiratory system. Toxic dust in the 0.1-10 um range find their way into the throat and lungs and can affect human health.

-Carcinogenicity: This compound contains inorganic lead (at a concentration of >1%) that is "possibly carcinogenic to humans" (IARC 2B), and a "confirmed animal carcinogen with unknown relevance to humans" (ACGIH A3). It also contains crystalline silica

This product is not a hazard as shipped/stored. Hazard occurs if broken, ground, polished or split into fine particles. Primary inhalation effects are those of lead and silica. If in dust form, treat as lead- and silica-containing dust.