



## Philips Lighting Company

---

### MATERIAL SAFETY DATA SHEET

**PRODUCT: QUARTZ INFRARED LAMPS (IRK)**

**Date: 07/01**

---

#### **SECTION 1: MANUFACTURE**

Manufacturer's Name and Address: Philips Lighting Company  
A Division of Philips Electronics  
North America Corporation  
200 Franklin Square Drive  
Somerset, NJ 08875

Emergency Telephone Numbers: (800) 424-9300 CHEMTREC  
(732) 563-3197

Other Information: (800) PLC-BULB

---

#### **SECTION 2: HAZARDOUS MATERIALS**

	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	
Tungsten (7440-33-7)	N/A	1 mg/m <sup>3</sup>	less than .1%
Bromine (7726-95-6)	.7 mg/m <sup>3</sup>	.7 mg/m <sup>3</sup>	less than .1%
Inert Ingredients (Quartz and other metals)			99+%

---

#### **SECTION 3: PHYSICAL DATA**

This item is a light bulb. Diameter is 3/8 of an inch. Length varies depending on wattage from 1 3/8 inch up to 38 inches. The tube is composed of Quartz.

---

#### **SECTION 4: FIRE AND EXPLOSION DATA**

**CAUTION:** This lamp is a heat source. Can cause serious burns. Surface temperature can reach 900oC depending on wattage. It is produced to warm or cook materials. Do not use in close proximity to combustible materials. May cause serious burns. Non-passive failures are rare, but if they occur can result in rapid ejection of very hot quartz particles.



A division of  
Philips Electronics North America Corporation

200 Franklin Square Drive  
P.O. Box 6800  
Somerset, NJ 08875-6800  
Tel: 732.563.3000

## **SECTION 5: REACTIVITY DATA**

Stability: Lamp is stable.

Polymerization: Not applicable to lamp. Infrared radiation can cause polymerization of certain materials as can Ultraviolet.

Reactivity: Quartz will react with hydrofluoric acid. Finger salts left of quartz can cause devitrification of the quartz if not cleaned off before lamp is started.

---

## **SECTION 6: HEALTH HAZARDOUS DATA**

**CAUTION:** Staring at lamp in operation may be harmful to the eyes. (For those lamps in Risk group 2, lamps with Color temp. between 2000oK and 3000oK) DO NOT STARE at exposed lamp in operation. See ANSI/IESNA Standard RP27. Do not use for therapeutic or topical applications unless recommended by a physician. These lamps do generate some Ultra violet energy, precautions should be taken to prevent exposure to this radiation as well as the infrared. Halogen bulbs operate at high pressure as well as high temperature. To protect against the hazards of UV exposure or hot flying fragments use only in equipment specifying this lamp and that provides a protective shielding of glass or plastic.

---

## **SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE**

**CAUTION:** Do not operate in close proximity to flammable materials or those adversely affected by heat or drying. Operate only in heat resistant sockets. Protect lamp from abrasions and avoid use in excess of 10% over voltage. To avoid risks of burns or other injury, disconnect power and allow lamp to fully cool before attempting to replace.

**WARNING:** Use carefully. May cause serious burns. Do not use over sensitive skin areas or in the presence of poor circulation. The unattended use of infrared heat by children or incapacitated persons may be dangerous.

IR can be emitted from certain types of these lamps. Appropriate eye protection should be used when working in the vicinity of these lamps.

Lamp should not be placed closer than 18" to the surface being irradiated.



A division of  
Philips Electronics North America Corporation

200 Franklin Square Drive  
P.O. Box 6800  
Somerset, NJ 08875-6800  
Tel: 732.563.3000

## **SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE (Cont'd)**

**WARNING (Cont'd):** To avoid possible delayed effects upon the lens of the eye (cataractogenesis) the infrared radiation should be limited to 10 mW/cm<sup>2</sup>. The ANSI/IESNA Standard RP27 spells out formulas for calculating exposure limits.

**Instructions:** Do not touch bulb with bare hands. Finger prints may result in reduced performance unless they are removed with alcohol.

Socket conditions may affect lamp life. Inspect and replace socket if deterioration has occurred.

Seal temperatures should not exceed recommendations for that voltage.

Use only in fixtures specifying this bulb type designed for the bulb's rated wattage and voltage.

---

## **SECTION 8: CONTROL MEASURES**

Broken lamps can be safely swept up and disposed as non hazardous waste. Taken prudent measures to avoid cuts from broken quartz.

Avoid dust exposure if breaking up large numbers of lamps. Quartz dust can cause lung damage. Use dust masks, goggles and gloves when breaking up lamps.

During operation take measures to prevent burns and retinal damage. Do not look directly at operating lamp.

Prepared: 12/11/2000

S23-00001



A division of  
Philips Electronics North America Corporation

200 Franklin Square Drive  
P.O. Box 6800  
Somerset, NJ 08875-6800  
Tel: 732.563.3000