PHILIPS

Philips Lighting Company

MATERIAL SAFETY DATA SHEET S21-95001
Revised: 12/2012

PRODUCT: HPA and HPM Reprographic Lamps

SECTION 1: MANUFACTURER

Manufacturer's Name and Address: Philips Lighting Company
A Division of Philips Electronics
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873-4186

Emergency Telephone No: (800) 424-9300 CHEMTREC
(800) 555-0050 Philips Lighting Technical Information

SECTION 2: HAZARDOUS INGREDIENTS

	CAS Number	OSHA (PEL) mg/m^3	ACGIH (TLV) mg/m^3	Weight %
Mercury	(7439-97-6)	0.1	0.025	<0.02
Lead Iodide	(10101-63-0)*	0.05	0.1	<0.02
Gallium Iodide	(13450-91-4)*			<0.02
Cobalt	(7440-48-4)+	0.1		<0.02

Krypton-85 HPM: <15 ηCi HPA: <50 ηCi.

*HPM Only +HPA Only

SECTION 3: CHEMICAL/PHYSICAL DATA

These items are light bulbs. The bulb is quartz. HPA lamps are about 30 cm long; HPM lamps are either 24 or 37 cm long. Other chemical or physical characteristics are not applicable.

SECTION 4: FIRE AND EXPLOSION DATA

WARNING: THE BULB WALL OF THIS ELECTRICAL DISCHARGE LAMP IS COMPOSED OF QUARTZ AND IS DESIGNED FOR USE ONLY WITH PROPER FIXTURES, IGNITORS AND BALLASTS. THE LAMP OPERATES UNDER HIGH INTERNAL PRESSURE AT VERY HIGH TEMPERATURES AND MAY RUPTURE UNEXPECTEDLY. IF RUPTURE OCCURS, DISCHARGE OF EXTREMELY HOT QUARTZ PARTICLES INTO THE ENCLOSURE AND/OR SURROUNDING ENVIRONMENT COULD OCCUR, CREATING A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, OR FIRE.

SECTION 5: REACTIVITY DATA

Stability: Envelope is stable.

Incompatibility: Envelope can be affected by oils and fats deposited on surface from fingers. Always wear gloves when handling the bulb.

While the amount of lead iodide is small and exposure occurs only if the lamp is broken, the following incompatibility is noted. Lead iodide is incompatible with hydrogen peroxide, strong oxidizers, sodium and potassium. Fluorine decomposes lead iodide at ambient temperatures, igniting the liberated iodine and generating much heat.

SECTION 6: HEALTH HAZARD DATA

WARNING: THIS LAMP EMITS SHORTWAVE ULTRAVIOLET RADIATION WHICH IS HARMFUL TO SKIN AND EYES AND CAN CAUSE SERIOUS SKIN BURNS AND EYE INFLAMMATION. USE ONLY IN EQUIPMENT SPECIFICALLY DESIGNED TO REDUCE THE RISK OF PERSONAL INJURY AND PROPERTY DAMAGE RESULTING FROM ARC TUBE RUPTURE AND FROM ULTRAVIOLET RADIATION. IT IS RECOMMENDED THAT THIS LAMP BE USED IN FIXTURES HAVING A SAFETY INTERLOCK SWITCH. LEAD IODIDE IS NOT LISTED AS A CARCINOGEN BY IARC, NTP, OR OSHA.

FIRST AID: If exposure to ultraviolet radiation occurs, it is recommended that an opthamologist be consulted.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

WASTE DISPOSAL METHOD: At the end of rated life, when this lamp is removed from service, it will be subjected to the current Toxic Characteristic Leaching Procedure (TCLP) prescribed by the Environmental Protection Agency. This test is used to determine whether an item is a hazardous waste or a non-hazardous waste under current EPA definitions. These lamps would fail the TCLP test and would be considered hazardous under the Universal Waste Rules. Generators should evaluate all of the disposal options, which may be available in the particular state in which the generator's facility is located. The generator should check with federal, state and local officials for their guidance. Philips

encourages recycling of its products by qualified recyclers.

Safe Handling: Read and Follow the installation/operating instructions listed below to help reduce risk of personal injury and property damage and help prevent early lamp failure:

1. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock & potential burn hazards.
2. Protect lamp from abrasions & scratches. Do not install or use cracked or broken lamps. If lamp cracks or breaks in use, disconnect power supply immediately, allow system to cool and remove lamp.
3. Do not touch lamp with bare hands. If touched with hands, clean lamp with denatured alcohol and wipe with a lint-free cloth before installing.
4. Replace lamp at or before the end of rated life. Allowing lamp to operate until it fails is not recommended and may increase the risk of inner arc tube rupture.
5. Use within voltage limits recommended by ballast manufacturer. Do not operate lamp at higher than specified power.
6. The permissible maximum operating temperatures (e.g., the pinch temperatures, the temperature of the bulb wall) as indicated on the product leaflet may not be exceeded.
7. Lamp should be operated within 10^{o} of the horizontal position to insure maximum operating efficiency.

SECTION 8: SPECIAL PROTECTION DATA

WARNING: THIS LAMP EMITS SHORTWAVE ULTRAVIOLET RADIATION. USE ONLY IN EQUIPMENT DESIGNED TO REDUCE RISK OF PERSONAL INJURY AND PROPERTY DAMAGE. DO NOT LOOK AT OPERATING LAMP WITHOUT PROTECTIVE FIXTURE AND/OR PROTECTIVE GOGGLES. DO NOT USE LAMP IF ULTRAVIOLET FILTER GLASS IS MISSING OR DAMAGED.

SECTION 9: SPECIAL PRECAUTIONS & COMMENTS

As a product these mercury-containing lamps being shipped in the manufacturer's original packaging are not regulated for ground or ocean shipment.

This material safety data sheet does not constitute "knowledge of the waste" in certain jurisdictions.

Prepared: 8/9/95 Revised: 12/2012
S21-95001