PHILIPS

Philips Lighting Company

MATERIAL SAFETY DATA SHEET

S15-93003
Revision: 12/2012

PRODUCT: MSR 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	% by Weight
Mercury	(7439-97-6)	0.05	0.05	<0.04%
Krypton-85				10-625 ηCi*

* Varies with Wattage.

SECTION 3: PHYSICAL DATA

Not applicable. This item is a light bulb. The lamp envelope is quartz as is the inner arc tube.

SECTION 4: FIRE AND EXPLOSION DATA

This item is a light bulb. The arc tube operates under high internal pressure at very high temperatures, as high as 800 ^{o}C, and may rupture unexpectedly. If a rupture occurs, the arc tube and/or the outer bulb could break and will result in the discharge of extremely hot quartz particles into the enclosure and/or environment thereby creating a risk of personal injury, property damage, or fire.

SECTION 5: REACTIVITY DATA

Stability: Lamp is stable.
Incompatibility: Quartz will react with hydrofluoric acid. Do not touch lamp with bare hands. If touched with bare hands, clean lamp with denatured alcohol and wipe with a lint free cloth before installing lamp. Skin oils and salt can cause devitrification of quartz.
Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

WARNING! This lamp emits short wave ultraviolet radiation, which is harmful to skin and eyes and can cause serious skin burns and eye inflammation. Use only if fully enclosed in a fixture with an ultraviolet absorbing filter glass lens. Do not use this lamp if the ultraviolet filter glass is missing or damaged. Luminaires must be constructed in such a way that no light is emitted by way of ventilation slots. It is recommended that this lamp be used in fixtures having a safety interlock lens switch.

EMERGENCY AND FIRST AID PROCEDURE: FOR ULTRAVIOLET EXPOSURE CAUSING SKIN EFFECTS, CONSULT A PHYSICIAN.

NORMAL FIRST AID PROCEDURE FOR GLASS CUTS IF SUCH OCCUS THROUGH LAMP BREAKAGE.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

Since these lamps operate at high pressure, there is a risk of arc tube rupture, which risk increases with age, temperature, and improper handling. It is recommended that lamps not be used beyond rated life.

1. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.
2. Install only in fixtures, which are fully enclosed, constructed in such a way that no light is emitted through ventilation slots, and able to contain fragments of hot quartz (up to 1000 ^{o} C). Lens/diffuser material must be heat resistant and capable of absorbing ultraviolet radiation. Consult fixture manufacturer regarding the suitability of the fixture for this lamp.
3. Do not operate a fixture with a missing or broken lens diffuser.
4. Protect lamp from abrasions and scratches. Do not install or use cracked or broken lamp. If lamp cracks or breaks in use, disconnect power supply immediately, allow system to cool, and remove lamp.

5. 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.
6. 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.
7. Use only with auxiliary equipment approved by Philips and/or meeting appropriate ANSI standards. Use within voltage limits recommended by ballast manufacturer.
8. Do not operate lamp at higher than specified power.
9. 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.

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.

SECTION 8: CONTROL MEASURES

Respiratory Protection: Appropriate dust mask should be used if large volumes of lamps are being broken for disposal. Mercury/ambient air level might be monitored to assure compliance with OSHA limits.

Ventilation: Avoid inhalation of any airborne dust. Provide local exhaust when disposing large quantities of lamps.

Hand & Eye Protection: Appropriate hand and eye protection should be worn when disposing of lamps or handling broken glass.

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