



## SAFETY & HANDLING

### FIRST-AID MEASURES

- **Glass cuts:** Perform normal first aid procedures. Seek medical attention as required.
- **Inhalation:** If discomfort, irritation or symptoms of pulmonary involvement develop, remove from exposures and seek medical attention.
- **Ingestion:** Seek medical attention.
- **Contact, Skin:** Thoroughly wash affected area with mild soap or detergent and water and prevent further contact. Seek medical attention if irritation occurs.
- **Contact, Eye:** Wash eyes immediately with water for 15 minutes. Seek medical attention.

### FIRE-FIGHTING MEASURES

The lamps themselves do not pose any significant fire risk. These lamps are typically part of, or installed in a system. It is recommended to use the appropriate fire extinguisher class (e.g. Class C for electrical fires), as applicable, based on equipment or environment. Under extreme high temperature conditions a lamp may burst, shattering the quartz and resulting in the discharge of extremely hot fragments (up to 1000°C). In this case there is risk of personal injury, property damage, burns and fires.

### HANDLING & STORAGE

- Halogen lamps operate at extremely high temperatures that can cause serious physical injuries and property damage.
- Only use halogen lamps in halogen approved fixtures.
- Do not use halogen lamps in close proximity of paper, cloth or other combustible materials that can cause a fire hazard.
- Lamps are very fragile. Do not drop, crush, bend or shake the lamps. Vibration or impact will cause filament breakage and short lamp life.
- Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and may cause serious burns.
- Do not look directly at the operating lamp for any period of time; this may cause serious eye injury.
- Always turn off the electrical power before inserting, removing or cleaning the lamp.
- Make sure lamps of specified wattage and voltage are only used in appropriately rated fixtures. Unspecified use will lead to short lamp life, breakage and overheating of the fixture.
- Lamps should not be operated beyond the total rated voltage. Avoid the use of dimmers that may drive the lamp over its rated voltage.
- Use an external fuse when required.
- Do not allow one lamp to directly expose another unless the system was carefully designed for this. This may lead to overheating and shortened lamps life.
- Do not touch the halogen bulb surface or inside reflectors with your bare hands. Oils from skin can lead to breakage or shorten the life of the lamp. Use clean gloves or a lint-free cloth for installation and removal.

## SAFETY & HANDLING

### ■ HANDLING & STORAGE (continued)

- Clean any dirt, oil or lint away from the lamp with alcohol and a lint-free cloth or tissue. Any foreign particles or materials on the bulb surface can cause hot spots on the bulb and result in lamp failure.
- Operate the lamp only in the indicated burn position. Failure to do so will lead to overheating and shortened lamp life.
- Electrical connections should be in good condition. Affix the lamp securely in the socket. Improper installations will cause electrical arcing, overheating, and shortened lamp and socket life. Replace lamps and sockets when needed.