

This can go under Resources

SAFETY INSTRUCTIONS:

METAL HALIDE & HIGH PRESSURE SODIUM DISCHARGE LAMPS

Please refer to these instructions before handling any MH or HPS lamps.

Verify “Enclosed Rated” Fixtures

Only lamps that are certified “Enclosed Rated” should be handled in an enclosed fixture that securely contains all parts of the lamp in case of a lamp blowout. Metal Halide (MH) and High Pressure Sodium (HPS) Discharge lamps operate at high temperatures, which are in danger of emitting harmful ultraviolet (UV) rays if the glass encasement (bulb) is broken. A ruptured lamp may cause physical injury to human operators or damage to property. Thus, preventive and protective safety glass is used with the fixture.

Know the Difference Between “Enclosed Rated” and “Open Fixture Rated” Lamps

As opposed to “Enclosed Rated” lamps are “Open Fixture Rated” lamps, which are approved for use in open fixtures. These types of lamps may utilize UV-resistant quartz or a film surrounding the arc tube to protect against glass scatter in case of a blowout.

MH discharge lamps may emit UV radiation when not utilized properly. Human skin and eyes are susceptible to UV radiation, and may be harmed if contact is made. MH discharge lamps that are not “Open Fixture” rated should ONLY be used in enclosed fixtures with UV-absorbing filter glass. DO NOT operate these lamps if the filter glass is shattered, ill-installed, or faulty in any way.

MH and HPS discharge lamps should ONLY be handled with compatible ballasts, type of rating (open or closed, wattage), and proper sockets. Lamps should only be handled and operated in its proper ‘on’ position.

To better ensure the prevention of blowout and/or overheating, please shut off MH lamps for at least 15 minutes per week.

Avoid Misuse of Lamp

Never operate a lamp beyond their rated lamp life. Over time, the risk of a lamp blowout increases. Other factors that increase the risk of a lamp blowout include temperature and misuse/improper handling. Make sure to switch out the lamp at or before the end of the rated life. Group relamping is highly recommended.

Before handling the lamp, including installation, removal, or maintenance, ALWAYS turn off the electrical power. Clean any particles off of the lamp by using a non-grainy cloth or

tissue and rubbing alcohol. Dirt and other particles will affect the light output over time and may cause the lamp to burn out, overheat, and/or decrease lamp life.

Make sure to keep regular maintenance on all electrical connections and ensure that they are in top condition. Maintain upkeep and replace sockets and lamp holders as needed. Ensure that the lamp is properly affixed in the socket. Improper installation will cause overheating, bursts, electrical arcing, and shortened overall fixture life.

Do not scratch the lamp, apply unnecessary pressure, or place the lamp in locations where it will be in danger of dropping. This will endanger the lamp and may cause it to rupture.

NEVER handle or operate a lamp outside of its rated voltage or current. The lamp will be in danger of bursting or leaking in the case of operating outside of its rated voltage or current.

DO NOT make contact with the lamp when on, or soon after it has been powered off. The heat will cause serious burns. Please allow lamps to cool for a minimum of 10-20 minutes after the lamp has been verified to have been powered off.

DO NOT operate the lamp near cloth, paper, or other combustible material. This may cause a fire hazard. Please avoid directing your eyes at the operating lamp. This may cause serious damages to the eye(s).

Proper Disposal

By default, MH discharge lamps contain mercury. Grow Pros Solutions cares about the environment and strives to be mindful of the use of resources. For proper disposal and recycling of lamps and products containing mercury, please refer to your local environmental safety regulations. For more information, visit <https://www.epa.gov/cfl/recycling-and-disposal-cfls-and-other-bulbs-contain-mercury>.

WARNING: "R" Type Lamps Are Not Self-Extinguishing

"WARNING: This lamp ["R" Type Lamps" can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available."

Complies with the USA Federal Standard 21 CFR 1040.30 and Canada Standard SOR/80-381.

Original:

SAFETY

METAL HALIDE & HIGH PRESSURE SODIUM DISCHARGE LAMPS

Lamps that are enclosed fixture rated should only be operated in an enclosed fixture that safely contains all lamp parts in the event of a lamp burst or rupture. These lamps operate at a high internal pressure and at high temperatures which can emit harmful ultraviolet light if the outer glass bulb is broken. A lamp may burst causing physical injury and property damage unless protective safety glass is used with the fixture.

Lamps that are open fixture rated are suitable for operation in open fixture designs. These types of lamps typically feature UV protective quartz and a secondary shroud surrounding the arc tube to prevent the scatter of glass in the event of a burst.

Metal Halide discharge lamps can emit ultraviolet radiation that may be harmful to eyes and skin. Metal Halide discharge lamps that are not open fixture rated, should only be used in enclosed fixtures with ultraviolet absorbing filter glass. Do not operate these lamps if the ultraviolet absorbing filter glass is broken or not installed.

Metal Halide and High Pressure Sodium discharge lamps should only be operated with the compatible ballast, rated fixture (open/closed, wattage), and socket. Only operate the lamp in its designated operating position.

Metal Halide lamps should be turned off for a minimum of 15 minutes per week.

Lamps should never be operated beyond their rated useful life. The risk of a lamp burst increases with lamp age, temperature, improper operation and improper handling. Replace the lamp at or before the end of its rated life. Group relamping is always recommended.

Never bump, drop, apply excessive stress, or scratch the lamp. This could cause the lamp to burst! Do not operate any lamps with any traces of scratches, cracks, or physical damage.

Never operate a lamp above or below its rated current or voltage. This may cause the lamp to leak or burst.

Always turn off the electrical power before inserting, removing, or cleaning the lamp. Clean any dirt, oil, or lint away from the lamp with alcohol and a lint-free cloth or tissue. Dirt or other contaminants will affect light output and may cause the lamp to overheat and decrease lamp life.

Electrical connections should be clean and in good condition. Replace lamp holders and sockets when needed. Affix the lamp securely in the socket. Improper installations will cause electrical arcing, overheating and short life to lamp and socket.

Never touch the lamp when it is on, or soon after it has been turned off, as it is hot and will cause serious burns. Lamps should be allowed to cool for a minimum of ten (10) minutes after the lamp is turned off.

Do not use lamp in close proximity of paper, cloth or other combustible material that can cause a fire hazard. Do not look directly at the operating lamp for any period of time; this may cause serious eye injury.

Metal Halide discharge lamps contain mercury. Grower's Choice strives to preserve the environment and make efficient use of resources. Please refer to your local environmental laws regarding disposal and recycling of mercury containing lamps. For more information, please go to www.lamprecycle.org

R - NON SELF EXTINGUISHING LAMP WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. Complies with the USA Federal Standard 21 CFR 1040.30 and Canada Standard SOR/80-381.