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SAFETY DIRECTIONS FOR
doped and non-doped mercury discharge lamps

These directions apply to the medium-pressure and high-pressure lamps produced and supplied by eta plus electronic gmbh. These lamps contain mercury as filling substance.

Small quantities of iron iodide, gallium iodide, indium iodide and lead iodide are used as doping substances. These substances are not classified as dangerous substances. As a general safety precaution we recommend avoiding any direct contact with eyes, skin and clothing. Danger of coming in contact with the filling substances exists only if the lamp body gets broken.

Packing and transport:

The packaging must reliably withstand the strain to be expected during transport. If the packaging is damaged the contents will have to be carefully checked for breakage and the packaging including contents must be vacuum-packed and disposed of.

Operation:

High voltage:
These lamps are fired with voltages up to 6,000 V. Please ensure that the European or International Standards such as e.g. EN 60204 for the electrical equipment of machines as well as the safety regulations for working places are observed prior to start-up. In particular, care has to be taken that the required creepage and sparking distances between the lamp base and the metallic parts are kept.

UV radiation:
During the operation of these lamps invisible UV radiation is emitted. It is essential to protect skin and eyes against direct or indirect UV radiation. These lamps may only be operated while installed in the light-proof protective housings provided for these purposes.

eta plus electronic gmbh
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Eingetragen unter HRB 724321 AG Stuttgart, USt.-Id.-Nr. DE 146267800, Geschäftsleitung: Uwe Uhlemann, Dr. Markus Roth

Ozone:

Due to the UV radiation emitted by these lamps, ozone is formed on the basis of the oxygen contained in the ambient air. The odour level lies at 0.02 ml/m³ (ppm). MAK: ozone is cancer-causing (category 3B) Suitable exhaust measures have to be taken to make sure that the MAK value is not exceeded.

Surface temperature:

During the operation of these lamps their surface temperature reaches values of up to 950°C. If using a water cooling system, leakage of the cooling system near the lamp may lead to the lamp being shock cooled. This shock cooling may entail the breakage of the lamp. If the temperature of the lamp body reaches the heat distortion temperature of the quartz due to insufficient cooling, this will entail a deformation of the lamp body and, moreover, a breakage of the lamp.

Breakage:

These lamps usually contain a few hundred milligrams of mercury. If the lamps get broken during installation or operation the room has to be sufficiently ventilated. The small quantities of mercury which escape from the lamp body in the case of breakage can be removed by means of special absorbing agents for mercury. The fragments of the lamps have to be packed air-tight and disposed of. When removing the mercury residues and fragments, a direct contact with skin, eyes or clothings must be avoided.

Disposal:

After use it is recommended to store and transport the lamps in the original packing. Broken lamps and parts contaminated by the mercury have to be vacuum-packed and disposed of. Lamps, broken lamps as well as contaminated packing material and other parts have to be considered as special waste. This waste may only be removed by authorized waste disposal companies.

UN number:

UN-Nr.: 3506

UN proper shipping name:

Mercury contained in manufactured articles

Transport hazard classes:

Class 8: corrosive

Packing group:

Does not apply any more

Packing instruction:

VA 869

Environmental hazards and special precautions for user:

Non dangerous goods according to IATA for lamps which individually don't contain more than 1g mercury and which are packed in a way that a single package doesn't contain a total quantity of mercury more than 30g.
Special provision A69(b) / 1.2.11 (a)

Mercury specification:

See material safety data sheet for mercury (CAS registry number 7439-97-6).

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