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Security advices for handling of ultraviolet radiation

UV Radiation
Ultraviolet radiation is dangerous to eyes and skin. You may use UV radiation sources only by taking appropriate security measures for your healthiness.

UV Prevention
254 nm UV radiation is shielded by normal sheet glass (borosilicate, duran, etc.), transparent plastics such as Makrolon®, Plexiglas® and nearly all nontransparent materials. If necessary, interfering glare effects can be reduced by using dyed materials. For additional information concerning UV filter please refer to norm Norm „EN 170 - Personal eye protection“.

Quartz glass is permeable to UV-C radiation and may not be used to protect persons.

Installation / Handling
Toggle switches, safety signs as well as enforced cut offs have to be fixed to responsibility and in discretion of the operator.

If single components are integrated in equipment, machines or test set-ups, it is the reponsibility of the operator to follow the relevant electrotechnical rules. The components have to be operated by trained and qualified staff only.

Material Resistance
Objects could change colour after long and intensive UV radiation. We recommend the usage of UV resistant material. If you use ozoniferous radiation sources please note that ozone makes a strong oxidative impact.

Ozone Generation
Using ozoniferous UV radiation sources the MWC value (maximum workplace concentration value) of 0,1 ppm must be strictly adhered to. For experimental set-ups it is recommended to use an appropriated air ventilation system.

Temperature
UV radiation sources with indium amalgam contamination will reach a hot temperature of approx. 90°C-100°C at the surface of the luminaire (medium pressure radiation sources approx. 850°C-950°C). Radiation sources have to be regarded as potential sources of ignition. Furthermore, the radiation source has to cool down sufficiently before touching it. Indium amalgam contaminated spotlights should cool down 2 - 5 minutes (medium pressiure spotlights 5 - 15 minutes) to ensure through-ignition of the radiation source after shutdown.

For any further questions please do not hesitate to contact us.
Your LTF team

I acknowledge and agree these advices:

Name: _____

Signature: _____

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