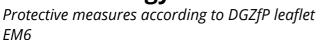


UV-technology





The following table describes the necessary protective measures depending on the risk classes. The information applies to an 8 h working day and a typical crack inspection workflow. If this is deviated from, a workplace-specific radiation exposure analysis must be carried out. In addition to the daily exposure limit value, the annual exposure limit value must also be taken into account.

Risk class	E <sub>eff</sub> [W/m <sup>2</sup> ]	Ε <sub>υν-Α</sub> [W/m <sup>2</sup> ]
0	0 to 0,1 x 10 <sup>-3</sup>	0 to 1
1	0,1 to 1,0 x 10 <sup>-3</sup>	1 to 10
2	1,0 to 10 x10 <sup>-3</sup>	10 to 100
3	10 to 31 x 10 <sup>-3</sup>	100 to300
4	> 31 x 10 <sup>-3</sup>	> 300



## UV-technology

Protective measures according to DGZfP leaflet EM6



isk class	Personal protective measures	Technical protective measures
0	No protective measures are necessary	
1	<b>Note:</b> UV lamps of these risk classes are usually insufficient for materials testing due to the irradiance required for defect detection	
2	<ul> <li>Access only for instructed personnel</li> <li>Body-covering work clothes and gloves (UV-impermeable)</li> <li>Eye protection by UV safety goggles, from 2-1.4 according to EN 170</li> </ul>	<ul> <li>Positioning of the UV lamp below eye level to prevent looking directly into the lamp</li> <li>Labelling of the lamp with</li> <li>Danger sign: "Caution: Ultraviolet radiation".</li> <li>Warning sign: "Caution: Dangerous optical radiation".</li> <li>Indication of the risk class</li> <li>Marking of the workplace with</li> <li>Prohibition sign: "No entry for unauthorised persons".</li> <li>Warning sign: "Caution: Dangerous optical radiation".</li> <li>Danger sign "Caution: Ultraviolet Radiation".</li> </ul>
3	<ul> <li>Access only for instructed personnel</li> <li>Body-covering work clothing and gloves (UV-impermeable)</li> <li>Eye protection by UV safety goggles for all persons in the work area (bystander)</li> </ul>	<ul> <li>Positioning of the stationary UV lamp below eye level to prevent direct viewing of the lamp.</li> <li>Labelling of the lamp with</li> <li>Danger sign "Caution: Ultraviolet radiation".</li> </ul>
4	<ul> <li>Access only for instructed personnel</li> <li>Body-covering work clothes and gloves (UV-impermeable)</li> <li>Full face protection (visor) is required</li> </ul>	<ul> <li>2. Warning sign: "Dangerous optical radiation".</li> <li>3. Indication of the risk class</li> <li>4. Mandatory sign "Wear eye protection</li> <li>Marking of the workplace with</li> <li>1. Prohibition sign: "Access for unauthorised persons prohibited</li> <li>2. Warning sign: "Caution: Dangerous optical radiation".</li> <li>3. Danger sign: "Caution: Ultraviolet radiation".</li> <li>4. Mandatory sign "Wear eye protection</li> <li>Secure the workplace against unauthorised access; the marking can be made e.g. on the door or on a barrier chain. For mobile testing, it is sufficient to place the signs at a distance of approx. 3 m from the radiation source.</li> </ul>