



## ISO/FDIS 11611:2022(E)

Position paper NA 075-05-02-01 AK N 67

Given recent developments in ISO 11611 standardization, it is necessary to draw attention to the urgency of addressing the impact of fluorescence on UV protection testing and the potential outcome if this issue is not addressed.

Without any doubt, due to the negative impact of artificial UV-radiation on the health of the welders, it is a necessity of high priority to include UV-Protection into the scope of ISO 11611. Depending on the method of welding, there is a lower or a higher degree of impact caused by the artificial UV radiation involved.

Therefore, we are convinced that adding a test method to the current draft to evaluate the level of protection of welding garments against artificial UV radiation emitted during various welding methods is a big deal and a good chance.

Whilst we fully understand and support the need to assess the UV protection of Welders' PPE, it is necessary to express our concerns about the impact of the current draft on all welding garments on the market.

Although the draft states that fluorescence, whether intentional or unintentional, will adversely affect UV test results, no feasible solution is offered for those materials where fluorescence cannot be avoided or is existing as a property. This includes all HiVis materials and furthermore fabrics with lighter colours, such as light grey. It is also questionable whether the method proposed in the draft of "pre-testing a colour range looking for the least fluorescent sample" offers a solution, as all the lighter colours tested so far have shown shorter protection times due to unintentional fluorescence.

The current draft also states that the most reliable method would be to test a blind-dyed material. Unfortunately, this has not yet been proven. On the contrary, a few tests that have been carried out have shown the opposite. In addition to whether it is possible to find a light-coloured or blind-dyed material without unintentional fluorescence, the requirement to produce a material sample just for testing purposes is a costly and administrative burden for all fabric suppliers, especially if the results are not comparable and comprehensible due to unintentional fluorescence, or do not provide a plausible solution to the problem.

From a garment manufacturer's point of view, this means, first and foremost, that there is a high uncertainty of whether current welding products produced from fabrics in different colours have to be excluded from the product range and can't be offered to customers in the future anymore, as the protection time can be reliably measured only for specific colours.

The deficiencies in the current draft will mean that a large proportion of products on the market will not be fit for purpose, not because of a lack of protection, but because of shortcomings in the test method or the standard's requirements. The standard draft prEN ISO 11611, if published in its current form without amendment, will create significant uncertainty and difficulty in the practical application.

Because of the high uncertainty of the measurement (UoM is stated to be 25-85% in the last RRT), there might be problems in product surveillance and re-certification of products. And this might cause issues with supplying customers with their necessary PPE garments just because of an uncertain or



not suitable method of testing.

It will also lead to increased costs due to the need for extensive testing of each colour, and more critically, garments might be classified with a lower performance level than achieved.

For the end user, it will mean a massive reduction in the range of options and choices available for different application areas and risks, especially in combination with necessary increased visibility (HIVis) and also increase in the cost of all welding products. Especially the market for garments that come with high-visibility and welding protection will come to a full stillstand. Knowing that this is the market with the biggest share over last years and that there are workplaces where both scopes of protection are urgently needed (e.g. railway workers) this will lead to an unacceptable outcome.

Having all this in mind, we, as a specialized manufacturer of PPE garments, are calling for a standard that is workable in practice and accurate enough to provide a reliable result of the protection provided by the garment, regardless of the type and area of application of the product. If this cannot be achieved with the current test method, a solution must be offered for those products that are in danger of being excluded just because the testing method is unsuitable for providing valuable results.

Various compromises have been suggested, but the only correct solution is to make testing optional for products showing fluorescence or not to finalize a standard without a valid testing method to achieve the intended scope of protection. The devastating effects on the market until a solution is found or more experience is gained must be avoided. Please consider the above problem when forming the final decision and position for the FDIS.

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