NEW ORGANIC ABSORBERS
FOR MODIFICATION OF TEXTILES
MADE OF CELLULOSE FIBRES
APPLIED FOR PERSONAL PROTECTION
AGAINST UV RADIATION

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ABSTRACT  The most important element in protecting the skin against the harmful effects of ultraviolet radiation emitted by natural and artificial sources is an apparel made from textile materials with a suitable barrier and wear properties. This paper presents test results of barrier properties against the ultraviolet radiation of a cotton knitted fabric modified with new organic UV absorbers based on 1,3,5-triazine – reactive and direct type. The effectiveness of the modified cotton knitted fabric, also after multiple-washings and exposure to UV radiation was tested on a double beam UV-Vis spectrophotometer. Wear properties of the barrier cotton knitted fabric applied for personal protective equipment such as: gloves, long sleeve shirts, hats, trousers were examined, too.

Keywords:  UV absorbers, UPF – Ultraviolet Protection Factor, protective textiles