

The author dealt with washing fastness testing and evaluation of 6 samples in the experimental part.

- Page 73 Because the sample is PES and thus the dyestuffs are certainly disperse I do not suppose that the covalent bond can be an explanation for the good washing fastness.
- Page 92 it is not necessary to repeat the same statement about elasthane from the page 91

I appreciate the chosen subject because the High Visibility clothing becomes more and more important in textile industry, not only for PPE but also for sports and casual clothing. I appreciate further the system to show the differences from various points of view (dE, max reflectance, loss of strength) to show the big differences in dyestuffs behaviour also withing the small gamut of fluorescent dyestuffs.

However the conclusions were too wide because the author considered the washing fastness improvement generally and not for this specific case – PES fibers and fluorescent disperse dyes.

I recommend the work to defend and assess it:

Good

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Opponent evaluation of diploma thesis of

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subject

Warning Clothing-Study of Fluorescence Fading in Washing

The theoretical part of the work deals with theory and various systems for colour measurement, fluorescence and high visibility warning cloths.

This part is very well organised and clear with relevant comments. I appreciate some practical examples like e.g. examples in visual evaluation of the same fixed difference for green and grey.

- Page 14 I did not understand the last sentence on the page regarding substantivity and the force to prevent removal. Please consider that dyestuff with higher substantivity is also more difficult to wash off after dyeing. Note also that washing fastness depends on many factors on the one hand on sample and on the other on washing conditions. The over last sentence may be understood that it is only substantivity and molecule polarity influencing the washing fastness.
- Page 22 The statement that dyes tend to be „impure“ is not precise because the batch to batch differences are caused also by differences in final treatment (coupage, etc.).
- Page 24 I do not understand the statement that by adding red the sample becomes less saturated. According to my experience there is changed Chroma and Hue mainly but it can be just a question, what is understood by „saturation“.
- Pages 33-35 The description of geometries for colour measurement is, compare to the other parts, not so clear and I suppose especially for this part pictures would be suitable to explain each geometry.
- Page 41 I am missing legend for PMT and CCD abbreviation.
- Pages 53 and further The detailed performance classes and compliance should be referred to a standard like EN 471 and/or EN 1150 especially, if all the other standards are mentioned in details and properly.

I would like to note that I did not evaluate syntax and grammar in details, because I am used to British or American English and thus I am not able to consider the differences and suitability of the used words properly.

Anyway I think that at the end of page 5 there is a not finished sentence: „If retro reflective“