Supporting Information

Acid dyeing of polyamide-6,6 fabric with carbon black nano particle for camouflage textiles in Vis-NIR Spectrums

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Table 1, reflection (%) of undyed PA-6,6 fabric and reflection (%) of CBP dyed PA-6,6 fabric with Formulation-1, PH:0; Formulation-2, PH:1; Formulation-3, PH:2; Formulation-4, PH:3; Formulation-5, PH:4; Formulation-6, PH:5; Formulation-7, PH:6.

Table 2, K-M reflection of undyed PA-6,6 fabric and CBNP dyed PA-6,6 fabric with Formulation-1, PH:0; Formulation-2, PH:1; Formulation-3, PH:2; Formulation-4, PH:3; Formulation-5, PH:4; Formulation-6, PH:5; Formulation-7, PH:6

Table 3, CIE color value of undyed PA-6,6 fabric and CBNP dyed PA-6,6 fabric with Formulation-1, PH:0; Formulation-2, PH:1; Formulation-3, PH:2; Formulation-4, PH:3; Formulation-5, PH:4; Formulation-6, PH:5; Formulation-7, PH:6.

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| --- | --- | --- | --- | --- |
|  | **L\*** | **a\*** | **b\*** | **∆E** |
| **Untreated PA-6,6 fabric** | 82.43 | -0.32 | -0.01 |  |
| **Formulation-1** | 46.98 | 1.06 | 3.98 | 35.71 |
| **Formulation-2** | 45.35 | 1.15 | 4.18 | 37.35 |
| **Formulation-3** | 42.79 | 1.18 | 4.47 | 39.92 |
| **Formulation-4** | 38.43 | 1.21 | 4.33 | 44.24 |
| **Formulation-5** | 42.62 | 1.19 | 4.37 | 40.08 |
| **Formulation-6** | 44.37 | 1.16 | 4.42 | 38.35 |
| **Formulation-7** | 54.63 | 0.55 | 2.41 | 27.92 |

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