

Table 5. Effect of benzyl alcohol usage on the washing and light fastness properties of dyed mohair samples (WO: Wool, PAC: Polyacrylonitrile, PES: Polyester, PA: Polyamide, CO: Cotton, CA: Cellulose Acetate).

	Dyeing Temp. – Time	Benzyl alcohol, ml/l	Washing fastness						Light fastness
			WO	PAC	PES	PA	CO	CA	
Telon Blue BRL Micro	100 °C – 90 min.	–	3	4-5	4-5	2-3	2-3	4	7-8
	100 °C – 60 min.	5	3	4-5	4-5	2-3	2-3	4	7-8
	90 °C – 90 min.	15	3	4-5	4-5	2-3	2-3	4	7-8
	80 °C – 90 min.	30	3	4-5	4-5	2-3	2-3	4	7-8
Telon Blue M-RLW	100 °C – 90 min.	–	5	5	5	4	4-5	5	7
	100 °C – 60 min.	5	5	5	5	4	4-5	5	7
	90 °C – 90 min.	15	5	5	5	4	4-5	5	7
	80 °C – 90 min.	30	5	5	5	4	4-5	5	7
Isolan Dark Blue 2S-GL	100 °C – 90 min.	–	5	5	5	4-5	4-5	5	7
	100 °C – 60 min.	5	5	5	5	4-5	4-5	5	7
	90 °C – 90 min.	15	5	5	5	4-5	4-5	5	7
	80 °C – 90 min.	30	5	5	5	4-5	4-5	5	7
Realan Blue RC	100 °C – 90 min.	–	5	5	5	5	4-5	5	6
	100 °C – 60 min.	5	5	5	5	5	4-5	5	6
	90 °C – 90 min.	15	5	5	5	5	4-5	5	6
	80 °C – 90 min.	30	5	5	5	5	4-5	5	6

Table 6. Kinetic parameters of dyeing mohair with Isolan Dark Blue 2S-GL.

Conditions of dyeing process	k, min ⁻¹	-Δμ, KJ·mol ⁻¹
100 °C – in the absence of benzyl alcohol	0,003685	-2,8636
80 °C – in the absence of benzyl alcohol	0,000871	-7,1724
80 °C – in the presence of 30 ml/l benzyl alcohol	0,002994	-3,3590

said that treating these fibres at lower temperatures will also decrease fibre damage. Furthermore it is thought that dyeing mohair fibres at lower temperatures/times could help to obtain bright colours (preserving fibre luster), which would also conserve energy.



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