

The SF Calf leather possesses all the best organoleptic properties for bookbinding and in addition to be sulphur free, the SF Calf is distinguished by the presence of an insignificant amounts of metals.

Regarding its long-term durability, an assessment of the coherence of dry fibres after an internal tropical test (50°C/90%RH/20 days) and an oxidation test (120°C/24-48-96 hours) showed that the SF Calf performed better than the other leathers analysed and which are sold as being archival. Figure 1 and table 1 shows the results of the fibre coherence test of the SF Calf and three commercial leathers A, B, C before and after accelerated ageing.

Figure 1.

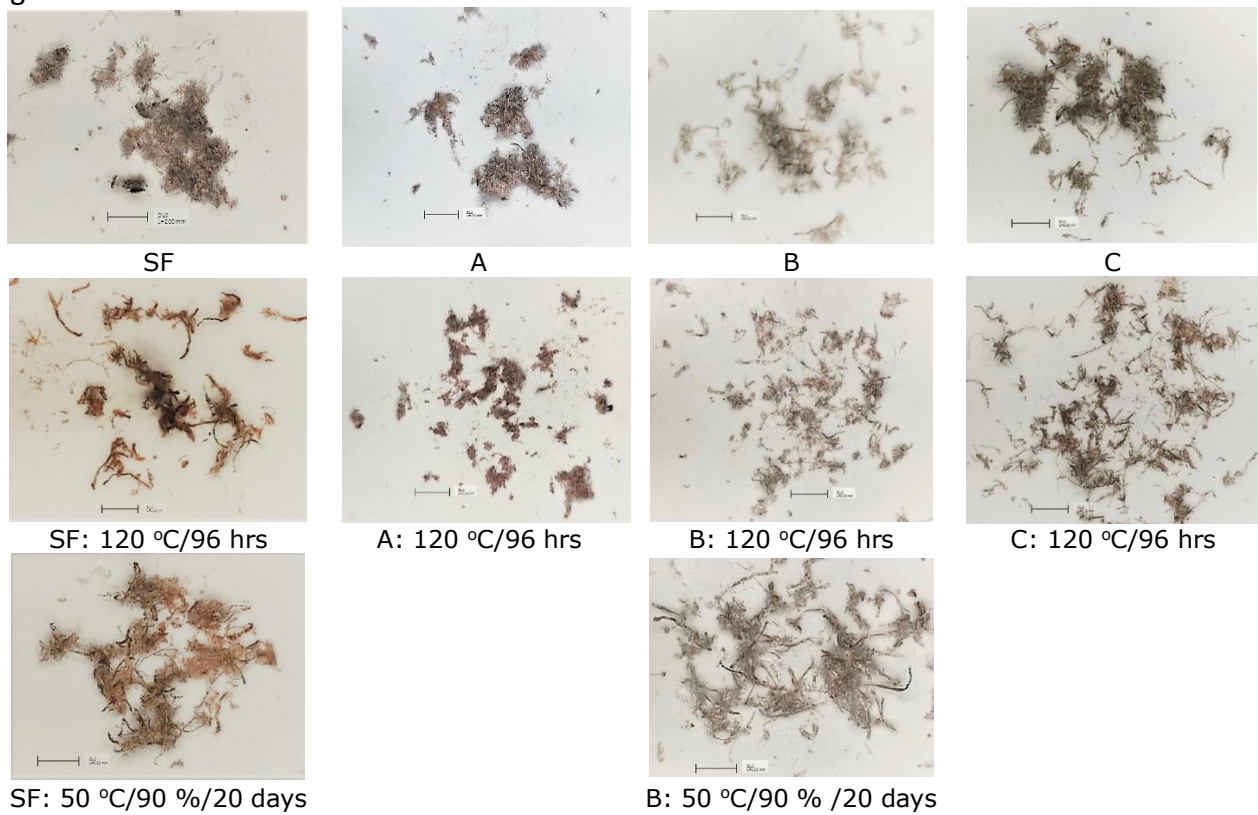


Table 1. The results of the testing the fibre coherence of SF Calf and the commercial leathers before and after accelerated ageing at 120° C for 96 hours and accelerated ageing at 50° C, 90 % RH for 20 days, respectively. Coherence categories goes from 1 (intact) to 5 (completely loss of coherence).

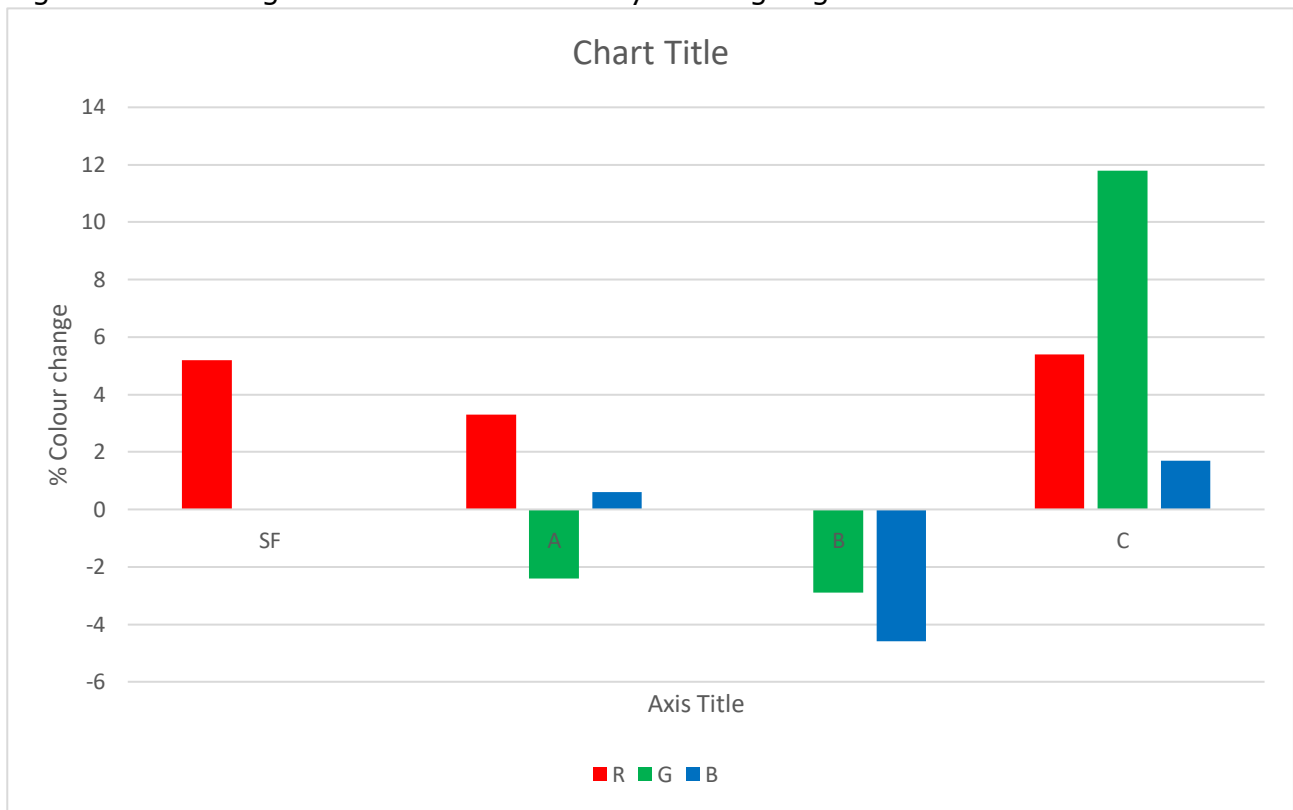
Sample	Coherence	Remarks
SF Calf	1	Very difficult to scratch
SF Calf: 120° C/96 hrs	3	Difficult to scratch
SF Calf: 50° C/90% RH /20 days	2,5	Difficult to scratch
A	2,5	Easy to scratch
A: 120° C/96 hrs	3,5	Less easy to scratch
B	2,5	Easy to scratch
B: 120° C/96 hrs	4,0	Easy to scratch
C	2	Easy to scratch
C: 120° C/96 hrs	4,0	Less easy to scratch
C: 50° C/90 % RH /20 days	3,5	Easy to scratch

Figure 2 shows the leathers before and figure 3 the % change of colors in RGB values (red-green-blue colour space) after the dry heat ageing at 120° C for 96 hours. The aging leads to SF Calf becoming a bit more reddish-brown. However, compared to the other leathers, SF Calf is the most durable with respect to colour under oxidative conditions such as heat and light.

Figure 2. Leather SF, A, B and C before and after ageing after the dry heat ageing at 120° C for 96 hours.



Figure 3. % change in colours after the dry heat ageing at 120° C for 96 hours.



With respect to the Climate test, the colour changes are slightly less for SF Calf compared to the change it undergoes in dry heat, whereas leather B becomes darker than in the dry heat ageing.

Thus, with respect to fibre strength and lightfastness, SF Calf is without doubt the most durable leathers among the tested leathers.

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Reference: Larsen, R., Siegel S., Themmen, E.R. In: Leather and Related Materials Working Group Newsletter— June 202