


Technical Data BOXER (Natural Leather)

Types of leather: Pigmented, Semi-Aniline, Aniline, Nubuk	Max. thickness: 1,1 mm
Boxer type of leather: Semi-Aniline	Min. thickness: 1,0 mm
Product characteristics: Half grain, embossed leather.	Average size of the hide: 4,0 – 5,0 sq.m.
Country of origin: Italy	Minimum size of the hide: 3,5 sq.m.
Crust color: match leather color	Stamp: no stamps
Raw skin region of origin: Europe	Production time: 45 days

 DGM Requirements for Upholstered Furniture - Leather RAL – GZ 430			Kind of leather tested	Result commentary
Test name	Test method	Test result		
1. External appearance	EN DIN 68 871 – 11/2011 (An external evaluation of the eye)	Compliant	Any type of leather	
2. Test propagation force	DIN EN ISO 3377-1	Min. 20 N/ mm	Any type of leather	
3. Light fastness	DIN EN ISO 105-B 02	Min. 5 Min. 4 Min. 3	Pigmented, Semi-Aniline, Aniline, Nubuk	White colored leather don't turn yellow
4. Rubbing fastness				No surface damage :
Dry	DIN EN ISO 11640 According to IUF 450	500 /250/ 80	Pigmented	500 (≥4) 250 (≥3/4) 80 (≥3/4)
Wet		500 /80/ 50	Semi-aniline	500 (≥4) 80 (≥3/4) 50 (≥3/4)
Sweat		50 /20/ 20	Aniline, Nubuk	50 (≥3) 20 (≥3) 20 (≥3)
5. Flexing Life	DIN EN ISO 5402	30.000 cycles	Any type of leather	No fitting break
6. Surface layer bond strength (adhesion)	ISO 11644 According to IUF 470	Min. 2,5 N/cm	Any type of leather	Surface layer should not be torn away
7. Scotch test			Any type of leather	No marks on scotch surface
8. Fastness to water drops (no permanent swelling)	DIN EN ISO 15700 IUF 420	Min. 10 Min.15	Pigmented, Semi-Aniline, Aniline, Nubuk	Absence of permanent droplets marks
9. Flammability	DIN EN 1021-1 and 121-2	Passed	Any type of leather	Not flammable
	Boston Fire Code (BFD 1X-1)	Passed	Any type of leather	Not flammable
	California Technical Bulletin 117	Class 1	Any type of leather	Not flammable
10. Cold resistance of the material:	DIN EN ISO 17233	-20°C	Semi-aniline, Pigmented	No fitting break

Chemical tested	Test method	Measure	Test result
pH acidity	UNI EN ISO 4045	-----	> = 3,2
Δ pH	UNI EN ISO 4045	-----	< = 0,7
Pentachlorophenol	UNI EN ISO 17070	mg/kg	< = 5,0
Chlorophenols	UNI EN ISO 17070	mg/kg	< = 5,0
Azo-dyes	ISO/TS 17234	mg/kg	< = 30
Formaldehyde	ISO/TS 17226	mg/kg	< = 150
Chrome (VI)	UNI EN ISO 17075	mg/kg	< 3,0
Lead, total (Pb)	UNI 10887	mg/kg	< 90
Cadmium, total (Cd)	UNI 10887	mg/kg	< 50