



TEXTUM

Qualitymanagement

Textum GmbH

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"In this day and age, it is important to be able to rely on your suppliers. We guarantee our customers that all our materials are subject to the strictest testing procedures and we only offer the highest quality."

Sasa Matijas, Managing Director

Our quality control procedures start in the country of origin. Cooperation with a company in Shanghai allows us to ensure that the goods are in perfect condition when they leave China. Our expert agent travels to the various different provinces to visit our suppliers and check dyes, packaging and how fabric is loaded. Each material is also subject to stringent quality control once it reaches our premises, ensuring all items which are added to the collection and sent out to customers are in perfect condition.

That is why we carefully examine shipping samples from our suppliers before the fabrics are shipped. Any items which do not meet our specifications are rejected. This secures us both against poor quality workmanship and fakes. The Textum GmbH checks at least one role of every incoming Lot on Pilling, Martindale, abrasion, color differences, tensile strength, weight, length, width and packing materials. If deficiencies are found with a role, of course, all roles will be tested.

Our quality managers have a range of ultra-modern equipment for in-house testing. For example, they can use the ultra-modern Martindale device to test samples for abrasion resistance and pilling. Individual items are tested again in spot checks before goods leave the warehouse. Rolls of fabric are completely unrolled to allow the entire length to be inspected. Great care is also taken in packaging the goods.

"No item leaves our warehouse without the approval and explicit agreement of our Quality Management Department."

Recep Selvi, Head of Purchasing

Collaboration with CTL-GmbH

Once an item has passed all our in-house tests, we send it to the CTL GmbH laboratory in Gütersloh for external testing. If the item passes the tests and no defects are found, it is then added to our collection and the supplier launches full production. We are in constant contact with CTL GmbH to guarantee quality assurance; all initial tests and complete annual testing is carried out in close cooperation between us and CTL GmbH.

The chemical tests on the CTL GmbH are repeated every year, so far in the internal incoming inspection (Martindale, pilling, tensile strength), no changes are observed. Is a variation of the test results at goods receipt noted, suggesting that a material change of supplier. This can for example be the case in the recruitment of an improved fiber. If the test results of the goods receipt differ from the usual results, the chemical tests at the CTL GmbH are carried out in either case. Furthermore, all suppliers are obliged to inform us if changes are made to the product.

On the following pages you will find an example test report of our furniture fabrics from the living area. Here you see all components of the tests we are carrying out.

Please do not hesitate to contact us if you have any comments or questions.



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IHR ZEICHEN / Your Ref. / VAS ZNAK:

Frau/Mrs./gda Lutrop

IHR SCHREIBEN VOM / Your letter dated / VAS DOPIS OD:

xx.xx.09

CTL-EINGANGSDATUM / Arrival Date CTL / CTL DATUM PRIMITKA:

xx.xx.09

AUSGABEDATUM / Date / DATUM IZDAVANJA:

xx.xx.09

CTL-NR./ CTL No. / CTL-BR.:

503 xxx

Prüfungen nach Anforderungen der DIN EN 14465:2006 – Möbelstoffe für den Wohnbereich

UPHOLSTERY FABRIC – TESTING ACC. TO DIN EN 14465:2006

Ispitivanja u skladu sa zahtjevima norme DIN EN 14465:2006 – tkanine za namjestaj u stambenim prostorima

Artikel: „“

Article / Proizvod

Prüfung <i>Investigation / Ispitivanje</i>	Vorschrift <i>Test Method/Standard Propis</i>	Ergebnis <i>Result / Rezultati</i>		Kategorie <i>Category Kategorija</i>
		Kette <i>Warp / osnova</i>	Schuss <i>Weft / potka</i>	
Zugfestigkeit <i>Tensile Strength Vlačna cvrstoca</i>	EN ISO 13934-1	N (%)	N (%)	A / A
Weiterreißfestigkeit <i>Tear Growth Resistance Otpornost na daljnje kidanje</i>	EN ISO 13937-3	N	N	A / A
Nahtschiebewiderstand <i>Resistance to seam slippage Otpornost sava na smicanje na pomicanje sava</i>	EN ISO 13936-2	mm	mm	A / A
Scheuerbeständigkeit <i>Abrasion Test Otpornost na habanje</i>	DIN EN ISO 12947-1 + DIN EN ISO 12947-2	Fadenbruch / <i>Yarn break / lom vlakna:</i> xx xxx Touren / <i>revs./ tura</i>		A
Pillbildung <i>Pilling Test Stvaranje pilinga</i>	DIN EN ISO 12945-2 2000 Touren/ <i>revs./tura</i> habanja	Note / Grade / ocjena :		A
Lichtechtheit <i>Fastness to light Postojanost na svjetlo Stufe/Grade 5 Osvjetljavanje do 5. stupnja</i>	EN ISO 105-B02 Verfahren / <i>method /</i> <i>postupak 2</i>	Note/Grade / ocjena:		⇒A
Reibechtheit <i>Fastness to rubbing Postojanost na trljanje</i>	EN ISO 105-X12	Trocken / <i>dry / suho</i>	Nass / <i>wet/ mokro</i>	A / A
		Note / Grade / ocjena :	Note / Grade / ocjena :	



**Artikel: „“**
Article/Proizvod

Prüfung <i>Investigation/ Ispitivanje</i>	Vorschrift / Methode <i>Test Method/Standard</i> <i>Propis / metoda</i>	Ergebnis <i>Result</i> <i>Rezultat</i>
Zigarettest Entzündbarkeit von Polsterstoffen <i>Ignition source smouldering cigarette /</i> <i>Test na cigarete</i> <i>Zapaljivost tkanina za tapeciranje</i>	BS 5852 - ohne Wässern – <i>without soaking</i> <i>bez voda</i>	„bestanden“ „pass“ „polozen“ kein Brennen erkennbar <i>no burning</i> <i>ne moze se ustanoviti gorenje</i>
Spray – Test <i>Spray – rating</i> <i>Sprej test</i>	AATCC 22* DIN EN 24 920	Note / Grade / ocjena : 0
Öl – Test <i>Oil –rating</i> <i>Test na ulje</i>	AATCC 118** DIN EN ISO 14 419	Note / Grade / ocjena : 0
Fleckschutzausrüstung <i>Soil-release finish</i> <i>Obrada protiv prljanja</i>		Keine Fleckschutzausrüstung vorhanden <i>No soil-release finish</i> <i>Nema obrade protiv prljanja</i>
Azofarbstoffe <i>Azo dyes</i> <i>Azo bojila</i>	§/cl. 64 LFGB B 82.02-2,3,4,9 Bestimmungsgrenze / <i>Detection Limit: 5 mg/kg /</i> <i>granica za odredivanje: 5 mg/kg</i> Grenzwert n. LFGB / <i>Limit value acc.to LFGB: 30 mg/kg</i> <i>Granicna vrijednost prema LFGB: 30 mg/kg</i>	Nicht nachweisbar <i>not detectable</i> <i>ne moze se dokazati</i>
Allergisierende Farbstoffe (Dispersionsfarbstoffe) <i>Allergy causing Dyes</i> <i>(Disperse Dyes)</i> <i>Bojila koja izazivaju alergiju</i> <i>(disprezijska bojila)</i>	*** (s. unten) (see below) / (vidi dolje) Richtwert: max. 5 mg/l <i>recommended value: max. 5mg/l</i> <i>Orijentaciona vrijednost:</i> <i>maks. 5 mg/l</i>	Nicht nachweisbar <i>not detectable</i> <i>ne moze se dokazati</i>
Formaldehyd, qualitativ <i>Formaldehyde, qualitative</i> <i>Formaldehid, kvalitativno</i>	Carbazol / Schwefelsäure <i>Carbazole / sulphuric acid</i> <i>karbazol / sumporna kiselina</i>	Nicht nachweisbar <i>not detectable</i> <i>ne moze se dokazati</i>
Faseranalyse <i>Fibre analysis</i> <i>Analiza vlakana</i>	Qualitativ: <i>Qualitative /</i> <i>Kvalitativno</i> Quantitativ: <i>Quantitative /</i> <i>Kvantitativno</i>	Kette / <i>warp / osnova</i> : Schuß / <i>weft / potka</i> :





*

Benotung / grading / Ocjene :

Note 100 – sehr gut Note 80 – gut Note 0 – sehr schlecht

Grade 100 – very good Grade 80 – good Grade 0 – very bad
ocjena 100 – vrlo dobro ocjena 80 – dobro ocjena 0 – vrlo lose

**

Benotung / grading / Ocjene :

Note 6 – sehr gut Note 3 – gut Note 0 sehr schlecht

Grade 6 – very good Grade 3 – good Grade 0 – very bad
ocjena 6 – vrlo dobro ocjena 3 – dobro ocjena 0 – vrlo lose

Allergisierende Dispersionsfarbstoffe / Allergy-causing dyes

Dünnschichtchromatographie TLC und HPLC mit DAD (UV/Vis-Detektor).

Unten aufgeführt sind die Dispersionsfarbstoffe, auf die vergleichend geprüft worden ist.

Gab es bei der TLC Hinweise darauf, dass allergisierende Dispersionsfarbstoffe vorlagen, so wurden diese über die aussagefähigere HPLC-Analyse bestätigt oder widerlegt.

Thin layer chromatography TLC and HPLC with DAD (UV/Vis-Detektor).

Disperzijska bojila koja izazivaju alergiju

Tankoslojna kromatografija TLC i HPLC s DAD-om (UV/Vis detektor)

Dolje su navedena disperzijska bojila za koja su izvršena usporedna ispitivanja

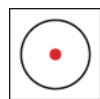
Ako bi kod TLC-a postojale naznake da su postojala disperzijska bojila koja izazivaju alergiju, onda su iste potvrđene ili opovrgnute pomoću HPLC analize koja pruža daleko bolje informacije.

Allergisierende Dispersionsfarbstoffe / Tested allergy-causing dyes / Disperzijska bojila koja izazivaju alergiju:

Blau / Blue / plavo 124	Rot / Red / crveno 17	Orange / orange / narancasto 3	Gelb / Yellow / zuto 3
Blau / Blue / plavo 106	Rot / Red / crveno 1	Orange / orange / narancasto 37/76	Gelb / Yellow / zuto 9
Blau / Blue / plavo 35		Orange / Orange / narancasto 1	Gelb / Yellow / zuto 23
Blau / Blue / plavo 3		Orange / orange / narancasto 11	
Blau / Blue / plavo 1		Orange / orange / narancasto 149	

Artikel: „“

Article/Proizvod

Empfohlene Pflegekennzeichnung / care labelling / Preporučeni simboli za održavanjeWaschen
wash
pranjeChloren
chlorinate
kloriranjeTrocknen
tumbler dry
susenjeBügeln
iron
glacanjeChemische
Reinigung
dry cleaning
kemijsko
ciscenje**Massänderung beim Waschen / dimensional change by washing / Promjena dimenzija kod pranja:**Kette / warp / osnova: %
Schuß / weft / potka: %

Gütersloh, den xx.xx.xxxx

.....
i.V. Heinz W. Eikermann

Explanation of CTL Test-Procedure

Source: CTL GmbH Bielefeld

Butane Gas Test (DIN EN ISO 1021-2)

This type of flammability test is identical to the cigarette test in its preparation. In this case, the source of ignition is a butane gas flame, which allows a flame to develop under standardised conditions in combustion tube size and gas flow regulation.

This flame resembles a burning match. The flame height is set to 3.5 cm. The combustion tube is then laid in the crease mark without any pressure and left to burn for 15 seconds in accordance with DIN EN ISO and 20 seconds in accordance with British Standards. After removing the source of ignition, the flame must be extinguished within a maximum of 120 seconds. The test should be repeated three times at different positions in intervals of at least 5 cm. All observations, such as smouldering fire through to the foam, must be noted.

Lightfastness (DIN EN ISO 105 B02)

Lightfastness is understood as the resistance of the dye of textiles of all kinds and in all processing conditions against the effect of an artificial light source, which corresponds to natural daylight. In use, textiles are normally subjected to light. The absorption of light from the radiation in the UV range triggers photometric processes in the dye molecules, which lead to colour change. As a general rule, the textiles become paler and duller, but can also change into other colours. The preparation of the test begins with the so-called blue scales.

These are specially dyed wool fabrics, which also show an even colour change with exposure to light. The series ranges from 1 "very slight" to 8 "very good" colour fastness. In the field of normal outer-wear, only 5 different blue dyed textile stripes or colour changes are attached to a card. For textiles which are subject to a higher intensity of light, e.g. curtain fabrics, sunshade fabric and ski clothing, Grades 6 to 8 are also used. All colours of the material being checked are also attached to the test card.

Now, the cards are put in the device and the test parameters are programmed in. In normal conditions, the temperature, intensity of radiation and time are set. Two covers are used so that there are also two light exposure phases. The first phase ends after a very short space of time ("First Break") and you see whether the dye is very quickly destroyed. Nevertheless, it can also be the case that no additional changes to the dye occur after longer periods of exposure to the light. The behaviour of the dyes is different. It can be that the dye shows no change for a long period of time and is then suddenly destroyed or that the dye changes into a completely new colour, i.e. one component is completely destroyed. In most cases, a bleaching which is consistent with the time occurs. The assessment takes place under a special assessment lamp. The test material is compared with the blue scales. The visible contrast between the illuminated and unlit surfaces of the sample is assessed. If the sample exhibits changes to the colour, which is towards the middle of two consecutive blue types, it must be assessed with a half level, e.g. grade 4-5.

Dimensional Change (DIN EN ISO 6330)

A piece of clothing must fit, even after washing. Every single end consumer demands this. In order to ensure a certain degree of dimensional stability, washing trials are carried out in the laboratory. There are different ways to determine dimensional change, for example, a conditioned t-shirt is placed as straight and smoothly as possible on a mat, the lengths and widths are measured at various points and the values are noted on a prepared outline. In the case of material sold by the metre, attention is paid to ensure that the measuring marks have sufficient interval from the cut and selvage edges. There are too high degrees of deviation and inconsistencies at the start and end of the products and also on torn parts. No dimensional change measurements can be carried out here. The marks are recorded in warp and fill directions over the product. The longer the marking segments can be and the more marking points you set, the more precise the later result of the dimensional change is.



The product to be checked is weighed before washing and then filled out with an appropriate amount of accompanying material so that the same conditions essentially exist in the load. The pieces are loosely put in the washing machine. The detergent and temperature are defined in accordance with the type of material. After washing, the product is line-dried or dried in a dryer and then conditioned. The washing samples are measured again, the product is pulled gently into shape. The measuring marks are re-measured and an extension is stated in plus percentage points or a shrinkage in minus percentage points.

Seam Slippage Strength

Seam slippage resistance is understood as the resistance which the yarn in a fabric counteracts a movement caused by the stitching.

Method 1 with fixed seam opening (DIN EN ISO 13936-1) In accordance with the guideline, the test specimens are prepared to a size of 10 cm in width and 20 cm in length in the warp and fill direction. Test specimens cut in the warp direction are termed as "Warp against warp = Filling movement" specimens. Accordingly, the term for specimens cut in the fill direction is "Fill against fill = warp movement". The test sample is turned down 11 cm from the short side and folded. With a 90 needle, a predefined polyester thread and a stitch setting of 5 stitches per centimetre, a stitch is stitched in a stitch interval of 12 mm from the fold line. The ends are knotted three times each and the hem is cut to the fold. The clamps and, as a result, the test width is 2.5 cm, the fixing length 10 cm. The stitched and unstitched specimens are measured in the same test mode. The software of the traction device determines the force, which must be applied to obtain a stitch opening of 2-6 mm.

Method 2 with fixed load (DIN EN ISO 13936-2) With the test as per method 2, the specimen preparations and stitch conditions are identical to the first method. This test determines the stitch opening with a predefined force effect. Depending on the field of use, the specimen is subject to an appropriate force, which is relevant for this item. The stitch opening is measured on the device with a scale and stated in mm.

Pilling Test (DIN EN ISO 12945-2)

This test checks the propensity to pilling of a product. Pilling means the small, undesired bobbles on a piece of clothing. The fibres become extracted from the material by mechanics, i.e. during use, and cause an unattractive fabric appearance. The laboratory test is adjusted to be an accurate portrayal of practice in order to carry out possible improvements in the finish before production and manufacture. The fabric samples for the pilling test are circular and at least three specimens of 14 cm diameter are cut and attached smoothly into a test bracket, each with a piece of felt as a mat. This holder is then used in the Martindale test device. Fabric is tested against fabric. The drive mechanism is made up of two external and one internal drive, which makes the guide plate move in an elliptical shape. The movements are counted in rounds, which you can preset on the device.

Depending on the customer requirement, there is the option to assess samples in several stages. Normally, an abrasion duration of 125 rounds stands for a brief wearing period and 2000 rounds for a longer period of wearing. The assessment is made in an illuminated observation cabin. The visual assessment of the samples is carried out by several people. The degree of pilling is expressed in grades, whereby Grade 5 represents no change and Grade 1 represents a very clear pilling formation on the surface.

Rubfastness (DIN EN ISO 105 X12)

This method determines to what extent the dye reacts to friction and staining from other materials. The material to be tested is clamped into the test device, the Crockmeter, with standardised conditions. A bleached cotton fabric of 5 x 5 cm acts as the friction material. This fabric is initially clamped in a pivot and rubbed on the test piece with ten backwards and forwards movements in ten seconds. The transfer of the dye during rubbing on the cotton fabric is termed staining and is assessed using a gray scale in standardised light conditions. In this case, Grade 1 is very poor and Grade 5 is very good.



In the next test, a white cotton fabric is moistened in distilled water and then squeezed of 95 % to 100 % of its water absorption.

The moist fabric is then clamped in the pivot and rubbed backwards and forwards ten times on the test sample in a new position. The treated accompany material is line-dried and then assessed with the grey scale accordingly.

Rubfastness for Leather (DIN EN ISO 11640)

Special requirements apply for the rubfastness of leather qualities. Here, the dry sample is placed in a standardised test device, stretched by 20 % and fastened at this tension. Dry, square wool felt pieces of defined thickness and dimensions are used as the rubbing material here. These are fastened to a 500 g stamp and subjected to several different rubbing cycles on the leather. The recommended cycles in accordance with the standard would be: 5, 10, 20, 50, 100, 200 or 500 rounds. The staining is assessed with the gray scale. A test with wet leather, wet felt or artificial perspiration solution would also be possible and are described in the standard.

Spray Test (DIN EN 24920)

The procedure describes the water-repellent property of textile material. The sample to be inspected is fixed into a metal holder and placed in the test control unit with an incline of 45° to the sprinkling filter. The middle of the test surface should be under the centre of the spray nozzle. 250 ml of distilled water will run through a vertically positioned funnel and a metal spray nozzle over the specimen. The assessment of the water-repellent finishing is assessed using Grades 1 to 5 or in accordance with the photographic AATCC* criterion of 0 to 100. Grade 1 or Grade 0 is the worst evaluation and describes a complete moistening or wetting of the specimen. Grade 5 or Grade 100 is the best evaluation. In this case, the water drops roll completely off the surface of the fabric.

Cigarette Test (DIN EN ISO 1021-1)

This test procedure determines the flammability of coverings and fillings when these are exposed to a smouldering cigarette as a source of ignition. All materials, which have been treated with a special flame retardant, must be moistened for 30 minutes in water with a German water hardness rating of 10°, then dried out and stored for at least 24 hours in a climate of at least 23 °C (+2 °C) and 50% (+5%) relative humidity. The sample and stuffing are cut to 80x65 cm. The thickness of the foam is 7.5 cm. Foam and test specimen are put in the test frame, angled to 90° and exposed to a certain tension using clamps so that it has a smooth surface with flat crease marks. The test room should be big enough that sufficient oxygenation can be guaranteed for the test.

The air speed must be set in the test room, e.g. using an extractor hood, so that the smouldering speed is 8 +2 minutes with 40 ml length. A conditioned, unfiltered cigarette is lighted and smoked 5-8 mm, positioned in the crease of the prepared seat cushion and the time is started on a stopwatch.

The combustion procedure is observed and any abnormalities are noted. The sample must not ignite. If ignition occurs, this time must be noted. Within the test period or the smouldering of the cigarette, the rise should not be more than 50mm to the edges of the sample.





Investigation	Test Method	Unit	Category				
			good		poor		
			A	B	C	D	E
Tensile Strength ^a	EN ISO 13934-1	N	> 600	≥ 400	≥ 350	≥ 250	—
Tear Growth Resistance ^a	EN ISO 13937-3	N	> 40	≥ 30	≥ 25	≥ 20	≥ 15
Resistance to seam slippage ^a	EN ISO 13936-2	mm	> 4	≥ 6	≥ 8	—	—
Bursting strength ^b	EN ISO 13938-1	KPa	> 600	≥ 400	≥ 200	—	—
Abrasion Test	EN ISO 12947-1/-2	Abrasion revs. (x1000)					
	flat woven fabric		≥ 35	12-30	4-10	—	—
	candlewick		≥ 35	12-30	4-10	—	—
	knitted fabrics		≥ 35	12-30	4-10	—	—
	cut pile fabrics		≥ 45	25-40	10-20	—	—
	uncut pile fabrics		≥ 45	25-40	10-20	—	—
	flock fabric		≥ 45	25-40	10-20	—	—
bonded fibre fabric	≥ 45	25-40	10-20	—	—		
brushed fabric	≥ 35	12-30	4-10	—	—		
Pilling Test ^c	EN ISO 12945-2 after 2000 revs.	grade 1-5	≥ 4-5	4	3-4	3	—
Fastness to light ^d	EN ISO 105-B02 (method 2)	grade 1-8	≥ 6	5	4	—	—
Fastness to rubbing (dry)	EN ISO 105-X12	grade 1-5	≥ 4-5	4	3-4	—	—
Fastness to rubbing (wet)	EN ISO 105-X12	grade 1-5	≥ 3-4	3	2-3	—	—

Special explanatory notes

- a) Testing for all fabrics, excluding knitted and bonded fibre fabrics
- b) Testing just for knitted and bonded fibre fabrics. A membrane with 50 cm² and an increase in volume of 100 cm³ /min is to be used.
- c) Testing for flat woven fabrics, knitted fabrics (without pile), uncut pile fabrics and bonded fibre fabrics; A standard wool rubbing fabric (acc. to EN ISO 12947-1) is used.
- d) Tolerance value of 0.5 fastness grades for bright coloured samples
- e) Method 3 is allowed for quality control.

Information on chemical testing for furniture covers



Test	Notes
GC-Screening:	This test is designed to find all volatile components which a product releases into a room. There is no fixed, defined method for this test. A set amount of the material is weighed out into a test vessel and heated up to 60°C. A sample is then taken from the headspace which forms and analysed using gas chromatography-mass spectrometry. Substances found are identified using a "library".
AZO:	This test uses the various methods set out in the Fleisch- und Bedarfsgegenstände-Verordnung (LFGB - German Food and Consumer Goods Regulations) to check for colorants which are thought to be carcinogenic. Tests are carried out in accordance with LFGB Section 64 B 82.02-2,3,4,9. Legal limit: 30 mg/kg (ppm).
Disperse dyes:	Some disperse dyes are thought to cause allergic reactions in humans. There are various lists of dyes to be tested for; we test according to the list most commonly used, which is part of the "chemical testing" regulations. Test: following DIN 54 231 (E). Legal limit: none; 5 to 60 mg/kg (ppm) = 5.0mg/l is generally taken as a maximum.
Carrier:	Organochloride carriers are used in for dyeing using disperse dyes. These substances can pose a health risk. Testing is done using GC/MS extraction. Legal limit: not absolutely fixed - generally taken as 1 mg/kg (ppm).
Pesticides:	Agricultural pesticides are used to prevent crops being attacked by pests and therefore need only be tested for in fabrics made of natural fibres. As there is a large number of different products and product categories, tests are expensive and take a considerable time: at least 14 days should be planned in for the testing process. Test: Various preparations and GC analyses following extraction. Legal limit: no overall limit; the best approach is to follow the rules for chemical testing, which allow an overall maximum of 1 mg/kg (ppm).

Information on chemical testing for furniture covers



Test	Notes
Pesticides:	<p>PCP, TeCP: Pentachlorophenol and/or tetrachlorophenol are used to preserve textiles, leather and some dye pastes, most often in products transported by sea. PCP and TeCP are toxic. Test in accordance with LFGB Section 64 B 82.02-8 (DIN 53 313) Legal limit: PCP - 5 mg/kg (ppm) - can also be assumed for TeCP.</p>
PCP, TeCP:	<p>Pentachlorophenol and/or tetrachlorophenol are used to preserve textiles, leather and some dye pastes, most often in products transported by sea. PCP and TeCP are toxic. Test in accordance with LFGB Section 64 B 82.02-8 (DIN 53 313) Legal limit: PCP - 5 mg/kg (ppm) - can also be assumed for TeCP.</p>
Formaldehyde:	<p>Formaldehyde is used as a preservative and in anti-mildew agents for a permanent finish. Formaldehyde can be volatile and be released into the air. It can irritate the eyes and mucous membrane and cause health problems. The test is initially qualitative. If there are signs of volatile formaldehyde, material should then be tested in accordance with LFGB Section 64 B 82.02-01 (DIN EN ISO 14 184-1) = additional costs. Legal limit: the set level is no longer appropriate. Materials should contain no formaldehyde >150 mg/kg (ppm). Detection limit: 5 mg/kg - limit pursuant to LFGB: 75 mg/kg. Max. known limit: max. 300 mg/kg.</p>
Plasticisers:	<p>The substances in question here are phthalate esters, used mainly in PVC but also in other synthetics. Modern studies have found that such products can cause health problems. GC/MS test following extraction. Items must be free from polycyclic aromatic hydrocarbons (PAH). Legal limit: general limit yet to be defined (items for small children may contain no more than 0.1% phthalate esters).</p>

Information on chemical testing for furniture covers



Test

Notes

Heavy metals:

Antimony, lead and cadmium: tests for these substances are mainly for environmental reasons, as the mere presence of such metals may not necessarily cause health problems. The test must use total decomposition (in accordance with EN 1122). Legal limit for cadmium: 100 mg/kg (ppm). Not entirely clear for lead and antimony; levels should not be more than 100 mg/kg (ppm) either.

Chrome VI:

Leather should be tested for chrome VI as chrome VI products can be used in tanning. Chrome VI is carcinogenic and can damage the cell tissue. Legal limit: the limit depends on the possibility of detection; according to the standards, it is 3 mg/kg (ppm).

TBT, DBT, (MBT):

are the organic tin compounds tributyltin, dibutyltin and monobutyltin. They occur in coating and can cause irritation of the skin and even cell damage. Test: following DIN 38 407 using GC/MS. Legal limit: not clear; the detectable amount should not be more than 1 mg/kg (ppm).

Dimethylfumarate:

In order to be able to demonstrate dimethylfumarate is a solvent extraction GCMS analysis performed. The result "dimethylfumarate: not detectable" is issued to a product only if the chemical value is less than 0.1 mg/kg. This is the official limit, underlying values can not be proven with technical testing equipment. The exact test procedure of the testing laboratories here were not disclosed because it is internal house methods.

Explanation: REACH

On 1st June 2007, the EU Chemicals Ordinance REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) came into force. It has the aim of increasing the level of knowledge about the dangers and risks which can arise from chemicals. Consequently, the company is now given more responsibility for the safe handling of its products.

Register, Report or Authorise?

The most time-intensive and difficult part of REACH is the registration of chemicals. The following companies are obligated to register:

-Those who import chemicals, preparations and/or products (only if chemicals are released from the product) from NON EU countries and recirculate them on the European market
-Those who use chemicals that are imported from NON EU countries in the production of preparations and products.

If the manufactured product or those imported from NON EU countries does not discharge the processed chemicals again, the candidate list must be taken into consideration. The manufacturer or importer must report to the ECHA if a chemical on this candidate list is present in the product with more than 0.1 mass percent.

-imported in quantities of more than 1 tonne per year. The chemicals on the candidate list are candidates for Annex XIV. Chemicals which are transferred into this annex must be authorised if the company wants to sell the products containing these chemicals in the European market.

What role does Textum GmbH play?

Textum is an importer of furniture upholstery fabrics which are classed as products by REACH. Product: object which receives a specific form, surface or design during manufacturer, which determines its function to a greater degree than the chemical composition (Art. 3, REACH Ordinance). Chemicals in preparations and products must be registered if these are to be released under normal or reasonably foreseeable conditions.

As this is not the case with upholstery fabrics, we are only obligated to report to the ECHA and our clients (Art. 33) for particularly worrisome chemicals if these are imported in the following concentration:

- More than 0.1 mass percent
- More than 1 tonne per year

A chemical is classed as particularly worrisome if it has been listed in a candidate list for inclusion in Annex XIV of the REACH Ordinance. This list is not a static entity.

The EU Commission currently plans to update the candidate list twice a year. Textum GmbH guarantees that no substances listed in the REACH candidate list are contained in our fabrics or that the relevant items will be authorised. We regularly check whether additional substances have been included.

For more information, please see:

www.echa.europa.eu
(ECHA homepage)

www.bmu.de/chemikalien/reach/verantwortliche_behoerden/doc/39994.php
(Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

www.reach-helpdesk.de
(REACH Helpdesk of the Federal Authorities)

www.reach-info.de
(REACH Information portal of the Federal Environment Agency)

