

# GUT Product Test Criteria and limit values

The GUT Signet can be granted only to members of Gemeinschaft umweltfreundlicher Teppichboden e.V.

(Only manufacturers of textile floorcoverings can become members)



The use of the substances listed below is either forbidden or GUT has specified limit values for the substances that must not be exceeded.

## ORGANIC CARRIERS (DYEING ACCELERANTS)

GUT test procedure No. 1

There is a ban on the use of the carriers listed.

Di-, tri-, tetra-, penta- and hexachlorobenzenes; di-, tri-, tetra- and pentachlorotoluenes

## AZODYES

GUT test procedure No. 2

There is a ban on the use of dyes and pigments which, under reductive conditions, release carcinogenic amines.

4-aminodiphenyl, benzidine, 4-chloro-o-toluidine, 2-naphthylamine, o-amino-azotoluene, 2-amino-4-nitrotoluene, p-chloroaniline, 2,4-diaminoanisole, 4,4'-diaminodiphenylmethane, 3,3'-dichlorobenzidine, 3,3'-dimethoxybenzidine, 3,3'-dimethylbenzidine, 3,3'-dimethyl-4,4'-diaminodiphenylmethane, p-cresidine, 4,4'-methylene-bis-(2-chloroaniline), 4,4'-oxydianiline, 4,4'-thiodianiline, o-toluidine, 2,4-diaminotoluene, 2,4,5-trimethylaniline, o-anisidine, p-amino-azobenzene\*, 2,4-xylidine, 2,6-xylidine, 6-amino-2-ethoxynaphthalene\*\*, 4-amino-3-fluorophenol\*\*  
(\*not identifiable, \*\*special procedure required)

## DISPERSE DYES

GUT test procedure No. 3

There is a ban on the use of the dyes listed, which are classified as "allergising".

C.I. Disperse Blue 1, -3, -7, -26, -35, -102, -106 and -124, C.I. Disperse Orange 1, -3, -37/76, C.I. Disperse Red 1, -11 and -17, C.I. Disperse Yellow 1, -3, -9, -39 and -49

## CARCINOGENIC DYES

GUT test procedure No. 4

There is a ban on the use of the dyes listed, which are classified as "carcinogenic".

C.I. Acid Red 26, C.I. Basic Red 9, C.I. Direct Red 28, C.I. Direct Blue 6, C.I. Disperse Blue 1, C.I. Disperse Yellow 3, C.I. Direct Black 38

## HEAVY METALS

GUT test procedure No. 5

Dyes and pigments containing the listed heavy metals as ingredients of the dyeing component must not be used to dye the pile material. The limit value for the total heavy metal content of a fitted carpet is 100 mg/kg.

Pb (lead), Cd (cadmium), Hg (mercury), Cr (chromium total) or Cr(VI)

## FLAME RETARDANTS

GUT test procedure No. 6

There is a ban on the use of the halogenous and phosphorous flame retardants listed.

PBB, TRIS, TEPA, SCCPs, PeBDE (pentabromodiphenylether)

## ACTIVE BIOCIDAL SUBSTANCES

### GUT test procedure No. 7

For the biocides listed that may be contained as active substances in respective formulations there is either a ban on their use or a limit value was specified for the respective active substance or group of active substances.

- 1) There is a ban on the use of products containing **TBT**.
- 2) The limit value for the **chlorophenols**, pentachlorophenol and tetrachlorophenol (PCP and TeCP), is 0.1 mg/kg.
- 3) For **orthophenylphenol** (OPP), there is a limit value of 1 mg/kg.
- 4) For the **chlororganic pesticides** listed, there is a limit value of 0.04 mg/kg for each individual substance and of 1 mg/kg for the sum of all components, respectively.  
o,p' and p,p' -DDE, -DDD and -DDT,  $\alpha$ ,  $\beta$ ,  $\delta$ ,  $\epsilon$ -hexachlorocyclohexane, aldrine, dieldrine, endrine, heptachlor, heptachloroepoxide, hexachlorobenzene, lindane, methoxychlor, mirex, toxaphene, \* $\alpha$ - and  $\beta$ -endosulphane
- 5) For the **phosphororganic pesticides** listed, there is a limit value of 0.04 mg/kg for each individual substance and of 1 mg/kg for the sum of all components, respectively.  
Diazinon, dichlorofenthion, dichlorophos\*\*, malathion\*\*, parathion-ethyl, parathion-methyl\*, trifluralin (\*special procedures required, \*\*other identification limits).
- 6) For the **herbicides**, 2,4,5-T and 2,4-D, there is a limit value of 0.04 mg/kg for each individual substance and of 1 mg/kg for the sum of all components, respectively.
- 7) Except for permethrine, there is a ban on the use of all **pyrethroids** for the protection of wool against moths and beetles.
- 8) As moth- and beetle-proofing agent for the sole finishing of woollen fitted carpets, **permethrine** may be used up to a maximum limit of 210 mg/kg. Application must be conducted in compliance with a prescribed procedure.

## EMISSIONS FROM TEXTILE FLOORCOVERINGS

### GUT test procedure No. 8

Volatile organic components from textile floorcoverings are determined in compliance with the test-chamber process. The following limit values are specified for the components listed.

TVOC	300 $\mu\text{g}/\text{m}^3$	Test chamber method (EN 13419; 1+2; ISO 16000). The test is performed 72h after $t = 0$ . For calculation and evaluation of the R-value, the actual LCI-Value List as published by AgBB* is used.
VOC without LCI	100 $\mu\text{g}/\text{m}^3$	
R-Value	$\leq 1$	
SVOC (C <sub>16</sub> to C <sub>22</sub> )	30 $\mu\text{g}/\text{m}^3$	
Cancerogenic Substances (EU-list Class 1 a. 2)	n.n.	

\* Ausschuss zur gesundheitlichen Bewertung von Baumaterialien

## ODOUR

### GUT test procedure No. 9

The material tested should only have the low-intensity odour typical of a new product.

The test mark following appraisal by a team of 7 persons must be a value  $< 4$ .

## REQUIREMENTS ON LATICES

### GUT test procedure No. 10

The latices used for coating must meet the following requirements on the residual monomer content.

For the individual substances styrene and 4-PCH, the limit value is 200 mg/kg of latex, and for ethylbenzene and 4-VCH, the limit value for each is 50 mg/kg of latex.

The limit value of the sum for all 4 components is 400 mg/kg of latex.

For the manufacture of foam coatings, there is a ban on the use of the vulcanisation accelerator Zn-diethyldithiocarbamate (ZDEC).