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Fürth, 27.10.2016

Test report No. FUHLP2016-13674

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Lab Director: Kerstin Scharrer

General note: Copying this test report partially is permitted only in agreement with the contracted lab. The tests results refer only to the tested item.
This report consists of 13 pages.
The test method signed with * is not listed in the attachment of the accreditation certificate.

Sample description: 3 samples: ¼"x 12"x12" Natural + R50 + Slate



No.	Tested component
1	¼"x12"x12" natural, plate beige
2	¼"x12"x12" r50, plate brown
3	¼"x12"x12" slate, plate black

Comment:

n.d. = not determinable
CS = combined sample

Testing of material samples for SVHC- candidate list of 20th of June 2016

1.1 Metals after total digestion in %

Test method: ICP OES according to DIN EN ISO 11885 (2009-09)
 Non-Metals and Metals: two stage microwave digestion: conc. HNO₃ / H₂O₂, inverse aqua regia solution
 Non-Metals: microwave digestion: conc. HNO₃ / H₂O₂
 Metals: microwave digestion with aqua regia solution according to DIN ISO 11466 (1997-06) complies with ISO 11466 (1995-03)

Limit of quantification (LOQ): see table

Substance name	LOQ	No. 1	No. 2
Antimony (Sb)	0.01 %	n.d.	n.d.
Arsenic (As)	0.01 %	n.d.	n.d.
Barium (Ba)	0.01 %	n.d.	n.d.
Lead (Pb)	0.01 %	n.d.	n.d.
Boron (B)	0.005 %	n.d.	n.d.
Cadmium (Cd)	0.01 %	n.d.	n.d.
Calcium (Ca)	0.01 %	n.d.	0.34
Chromium (Cr)	0.005 %	n.d.	n.d.
Cobalt (Co)	0.01 %	n.d.	n.d.
Potassium (K)	0.005 %	n.d.	0.0083
Molybdenum (Mo)	0.01 %	n.d.	n.d.
Sodium (Na)	0.008 %	0.18	0.21
Strontium (Sr)	0.01 %	n.d.	n.d.
Zinc (Zn)	0.01 %	n.d.	n.d.

Test method: ICP OES according to DIN EN ISO 11885 (2009-09)
 Non-Metals: microwave digestion with inverse aqua regia solution
 Metals: microwave digestion with aqua regia solution according to DIN ISO 11466 (1997-06) complies with ISO 11466 (1995-03)

Limit of quantification (LOQ): see table

Substance name	LOQ	No. 1	No. 2
Tin (Sn)	0.01 %	n.d.	n.d.

1.2 Chromium VI in %

Test method: Plastics: alkaline Extraction according to IEC 62321:2008* / Detection with IC-UV/VIS resp. Photometer
 Metals: Boiling water extraction according to IEC 62321:2008* / Detection with IC-UV/VIS resp. Photometer
 Textiles: Extraction with acid sweat solution according to DIN EN ISO 105-E04 (2013-08) / Detection with IC-UV/VIS resp. Photometer
 Leather: §64 LFGB B 82.02-11 resp. DIN EN ISO 17075 (2008-02) / Detection with IC-UV/VIS resp. Photometer

Limit of quantification: Plastics / Textiles / Leather: 0.001%
 Metals: negative (<0.02 mg/kg with 50 cm²)

No. 1	n.d.
No. 2	n.d.

Regarding point 1.1 and 1.2 the following concentrations result for the listed SVHCs

Substance name	CAS-No.	Calculated concentration of No. 1 (assuming the worst-case)	Calculated concentration of No. 2 (assuming the worst-case)
Ammonium dichromate	7789-09-5	< 0.1%	< 0.1%
Boric acid	10043-35-3 11113-50-1	< 0.1%	< 0.1%
Lead chromate	7758-97-6	< 0.1%	< 0.1%
Sodium chromate	7775-11-3 10588-01-09	< 0.1%	< 0.1%
C.I. Pigment Red 104	12656-85-8	< 0.1%	< 0.1%
C.I. Pigment Yellow 34	1344-37-2	< 0.1%	< 0.1%
Potassium chromate	7789-00-6	< 0.1%	< 0.1%
Potassium dichromate	7778-50-9	< 0.1%	< 0.1%
Sodium dichromate	7789-12-0 10588-01-9	< 0.1%	< 0.1%
Dichromium tris(chromate)	24613-89-6	< 0.1%	< 0.1%
Acids generated from Chromium trioxide	Chromic acid	7738-94-5	< 0.1%
	Dichromic acid	13530-68-2	< 0.1%
	Oligomers of chromic acid and dichromic acid	--	< 0.1%
Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	< 0.1%	< 0.1%
Tetraboron disodium heptaoxide, hydrate	12267-73-1	< 0.1%	< 0.1%
Lead hydrogen arsenate	7784-40-9	< 0.1%	< 0.1%
Diarsenic pentaoxide	1303-28-2	< 0.1%	< 0.1%
Diarsenic trioxide	1327-53-3	< 0.1%	< 0.1%
Triethyl arsenate	15606-95-8	< 0.1%	< 0.1%
Calcium arsenate	7778-44-1	< 0.1%	< 0.1%
Arsenic acid	7778-39-4	< 0.1%	< 0.1%
Trilead diarsenate	3687-31-8	< 0.1%	< 0.1%
Lead dipicrate	6477-64-1	< 0.1%	< 0.1%
Cobalt dichloride	7646-79-9	< 0.1%	< 0.1%
Cobalt(II)sulphate	10124-43-3	< 0.1%	< 0.1%
Cobalt(II)dinitrate	10141-05-6	< 0.1%	< 0.1%
Cobalt(II)carbonate	513-79-1	< 0.1%	< 0.1%
Cobalt(II)diacetate	71-48-7	< 0.1%	< 0.1%
Chromium trioxide	1333-82-0	< 0.1%	< 0.1%
Strontium chromate	7789-06-2	< 0.1%	< 0.1%
Potassium hydroxyoctaoxidizincatedichromate	11103-86-9	< 0.1%	< 0.1%
Pentazinc chromate octahydroxide	49663-84-5	< 0.1%	< 0.1%
Lead azide, Lead diazide	13424-46-9	< 0.1%	< 0.1%
Lead styphnate	15245-44-0	< 0.1%	< 0.1%
Diboron trioxide	1303-86-2	< 0.1%	< 0.1%
Lead(II) bis(methanesulfonate)	17570-76-2	< 0.1%	< 0.1%
Fatty acids, C16-18, lead salts	91031-62-8	< 0.1%	< 0.1%
Acetic acid, lead salt, basic	51404-69-4	< 0.1%	< 0.1%
Trilead bis(carbonate)dihydroxide	1319-46-6	< 0.1%	< 0.1%
Lead oxide sulfate	12036-76-9	< 0.1%	< 0.1%
[Phthalato(2-)]dioxotrilead	69011-06-9	< 0.1%	< 0.1%
Dioxobis(stearato)trilead	12578-12-0	< 0.1%	< 0.1%
Lead bis(tetrafluoroborate)	13814-96-5	< 0.1%	< 0.1%
Lead cyanamidate	20837-86-9	< 0.1%	< 0.1%
Lead dinitrate	10099-74-8	< 0.1%	< 0.1%
Lead monoxide (lead oxide)	1317-36-8	< 0.1%	< 0.1%
Orange lead (lead tetroxide)	1314-41-6	< 0.1%	< 0.1%
Lead titanium trioxide	12060-00-3	< 0.1%	< 0.1%
Lead titanium zirconium oxide	12626-81-2	< 0.1%	< 0.1%
Pentalead tetraoxide sulphate	12065-90-6	< 0.1%	< 0.1%
Pyrochlore, antimony lead yellow	8012-00-8	< 0.1%	< 0.1%
Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8	< 0.1%	< 0.1%
Silicic acid, lead salt	11120-22-2	< 0.1%	< 0.1%
Sulfurous acid, lead salt, dibasic	62229-08-7	< 0.1%	< 0.1%
Tetraethyllead	78-00-2	< 0.1%	< 0.1%
Tetralead trioxide sulphate	12202-17-4	< 0.1%	< 0.1%
Trilead dioxide phosphonate	12141-20-7	< 0.1%	< 0.1%

Cadmium oxide	1306-19-0	<0.1%	<0.1%
Cadmium	7440-43-9	<0.1%	<0.1%
Cadmium sulphide	1306-23-6	<0.1%	<0.1%
Lead diacetate	301-04-2	<0.1%	<0.1%
Sodium perborate; perboric acid, sodium salt	-	<0.1%	<0.1%
Sodium peroxometaborate	7632-04-4	<0.1%	<0.1%
Cadmium chloride	10108-64-2	<0.1%	<0.1%
Cadmium fluoride	7790-79-6	<0.1%	<0.1%
Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	<0.1%	<0.1%
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	<0.1%	<0.1%
Cadmium sulphate	10124-36-4 31119-53-6	<0.1%	<0.1%

2. Organic substances in %

Test method:

Phthalates acc. to 12.01.02.04_Phthalate 2015-01

*Extraction with organic solvent, measurement GC/MS, LC/MS resp. GC-ECD-FID

Limit of quantification (LOQ):

see table

Substance name	LOQ	CAS-No.	No. 1	No. 2
Diisobutylphthalate (DIBP)	0.05%	84-69-5	n.d.	n.d.
Dibutylphthalate (DBP)	0.05%	84-74-2	n.d.	n.d.
Benzylbutylphthalate (BBP)	0.05%	85-68-7	n.d.	n.d.
Bis(2-ethylhexyl)phthalate (DEHP)	0.05%	117-81-7	n.d.	n.d.
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (corresponds to di-iso-heptylphthalate (DIHP))	0.05%	71888-89-6	n.d.	n.d.
Bis(2-methoxyethyl)phthalate (DMEP)	0.05%	117-82-8	n.d.	n.d.
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (Dipentylphthalates) <i>(Analytically determined via the concentration of N-pentyl-isopentylphthalate, Diisopentylphthalate and Dipentylphthalate)</i>	0.05%	84777-06-0	n.d.	n.d.
N-pentyl-isopentylphthalate	0.05%	776297-69-9	n.d.	n.d.
Diisopentylphthalate	0.05%	605-50-5	n.d.	n.d.
Dipentylphthalate (DPP)	0.05%	131-18-0	n.d.	n.d.
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNU)	0.05%	68515-42-4	n.d.	n.d.
<i>(Analytically determined via the concentrations of diheptyl- and diundecylphthalate)</i>				
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear <i>(Analytically determined via the concentrations of diisohexylphthalate and di-n-hexylphthalate)</i>	0.05%	68515-50-4	n.d.	n.d.
Di-n-hexylphthalate (DnHP)	0.05%	84-75-3	n.d.	n.d.
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters <i>(Analytically determined via the concentrations of Dihexyl-, Dioctyl-, Dedecylphthalat; contains > 0.3% Dihexylphthalate)</i>	0.05%	68515-51-5 68648-93-1	n.d.	n.d.

N,N,N',N'-Tetramethyl-4,4'-methylenedianiline (Michler's base)	0.05%	101-61-1	n.d.	n.d.
4,4'-Bis(dimethylamino)benzophenone (Michler's Ketone)	0.05%	90-94-8	n.d.	n.d.
α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalin-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>		6786-83-0	n.d.	n.d.
[4-[4,4'-Bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chlorid (C.I. Basic Violet 3) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>		548-62-9	n.d.	n.d.
[4-[[4-anilino-1-naphthyl]][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with $\geq 0.1\%$ of Michler's		2580-56-5	n.d.	n.d.

ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2) <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>				
4,4'-Bis(dimethylamino)-4''-(methylamino)trityl alcohol [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>	561-41-1	n.d.	n.d.	

4,4'- Diaminodiphenylmethane (DADPM)	0.05%	101-77-9	n.d.	n.d.
Formaldehyde, oligomeric reaction products with aniline (technical MDA) <i>(Analytically determined via the concentrations of 4,4'- Diaminodiphenylmethane (DADPM))</i>		25214-70-4	n.d.	n.d.

Anthracene	0.05%	120-12-7	n.d.	n.d.
Anthracene oils and anthracene pastes <i>(Analytically determined via the concentration of anthracene)</i>		90640-80-5 91995-17-4 91995-15-2 90640-82-7 90640-81-6	n.d.	n.d.
Coal tar <i>(Analytically determined via the concentration of the sum of the 12 polycyclic aromatic hydrocarbons)</i>	0.05%	65996-93-2	n.d.	n.d.

Pentadecafluorooctanoic acid (PFOA)	0.05%	335-67-1	n.d.	n.d.
Ammonium pentadecafluorooctanoate (APFO) <i>(Analytically determined via the concentration of Pentadecafluorooctanoic acid (PFOA))</i>		3825-26-1	n.d.	n.d.

2,4-Dinitrotoluene	0.05%	121-14-2	n.d.	n.d.
Tris(2-chloroethyl)phosphate (TCEP)	0.05%	115-96-8	n.d.	n.d.
Trixylyl phosphate	0.05%	25155-23-1	n.d.	n.d.
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	0.05%	81-15-2	n.d.	n.d.
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	0.05%	101-14-4	n.d.	n.d.
o-Anisidine ; 2-Methoxyaniline;	0.05%	90-04-0	n.d.	n.d.
Tributyl tin oxide (TBTO)	0.05%	56-35-9	n.d.	n.d.
Dibutyltin dichloride (DBTC)	0.05%	683-18-1	n.d.	n.d.
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	0.05%	2451-62-9	n.d.	n.d.
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazin-2,4,6-(1H,3H,5H)-trione (β -TGIC)	0.05%	59653-74-6	n.d.	n.d.
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	0.05%	1163-19-5	n.d.	n.d.
6-methoxy-m-toluidine (p-cresidine)	0.05%	120-71-8	n.d.	n.d.
Nitrobenzene	0.05%	98-95-3	n.d.	n.d.
Direct Red 28	0.05%	573-58-0	n.d.	n.d.
Direct Black 38	0.05%	1937-37-7	n.d.	n.d.
4-Aminoazobenzene	0.05%	60-09-3	n.d.	n.d.
o-Toluidine	0.05%	95-53-4	n.d.	n.d.
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	0.05%	95-80-7	n.d.	n.d.
o-aminoazotoluene	0.05%	97-56-3	n.d.	n.d.
4,4'-oxydianiline and its salts	0.05%	101-80-4	n.d.	n.d.
Biphenyl-4-ylamine	0.05%	92-67-1	n.d.	n.d.
4,4'-methylenedi-o-toluidine	0.05%	838-88-0	n.d.	n.d.
Short chain chloroparaffins C ₁₀ -C ₁₃ (SCCP)	0.05%	85535-84-8	n.d.	n.d.
Hexabromocyclododecane (HBCDD)	0.05%	25637-99-4 3194-55-6	n.d.	n.d.
Phenolphthaleine	0.05%	77-09-8	n.d.	n.d.
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	0.05%	88-85-7	n.d.	n.d.
Perfluorononan-1-oic-acid and its sodium and ammonium salts (PFNA)	0.05%	375-95-1 21049-39-8 4149-60-4	n.d.	n.d.
1,3-propanesultone	0.05%	1120-71-4	n.d.	n.d.
Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	0.05%	25550-51-0 19438-60-9 48122-14-1 57110-29-9	n.d.	n.d.
Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic	0.05%	85-42-7 13149-00-3	n.d.	n.d.

anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride		14166-21-3		
4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	0.05%	140-66-9	n.d.	n.d.
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO)	0.05%	--	n.d.	n.d.
4-Nonylphenol, branched and linear	0.05%	--	n.d.	n.d.
Henicosafuoroundecanoic acid	0.05%	2058-94-8	n.d.	n.d.
Pentacosafuorotridecanoic acid	0.05%	72629-94-8	n.d.	n.d.
Tricosafuorododecanoic acid	0.05%	307-55-1	n.d.	n.d.
Heptacosafuorotetradecanoic acid	0.05%	376-06-7	n.d.	n.d.
Methoxyacetic acid	0.05%	625-45-6	n.d.	n.d.
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	0.05%	123-77-3	n.d.	n.d.
Bis(2-methoxyethyl) ether	0.05%	111-96-6	n.d.	n.d.
1,2-Bis(2-methoxyethoxy)ethan (TEGDME; triglyme)	0.05%	112-49-2	n.d.	n.d.
1,2-Dimethoxyethane Ethylene glycoldimethylether (EGDME)	0.05%	110-71-4	n.d.	n.d.
Trichloroethen	0.05%	79-01-6	n.d.	n.d.
Acrylamide	0.05%	79-06-1	n.d.	n.d.
2-Methoxyethanol	0.05%	109-86-4	n.d.	n.d.
2-Ethoxyethanol	0.05%	110-80-5	n.d.	n.d.
1,2,3-Trichloropropane	0.05%	96-18-4	n.d.	n.d.
1-Methyl-2-pyrrolidone	0.05%	872-50-4	n.d.	n.d.
Hydrazine	0.05%	302-01-2 7803-57-8	n.d.	n.d.
2-Ethoxyethyl acetate	0.05%	111-15-9	n.d.	n.d.
N,N-dimethylacetamide (DMAC)	0.05%	127-19-5	n.d.	n.d.
1,2-Dichloroethane	0.05%	107-06-2	n.d.	n.d.
Furan	0.05%	110-00-9	n.d.	n.d.
Diethyl sulphate	0.05%	64-67-5	n.d.	n.d.
Dimethyl sulphate	0.05%	77-78-1	n.d.	n.d.
N-methylacetamide	0.05%	79-16-3	n.d.	n.d.
Methyloxirane (Propylene oxide)	0.05%	75-56-9	n.d.	n.d.
1,2-Diethoxyethane	0.05%	629-14-1	n.d.	n.d.
1-bromopropane (n-propyl bromide)	0.05%	106-94-5	n.d.	n.d.
N,N-dimethylformamide	0.05%	68-12-2	n.d.	n.d.
Formamide	0.05%	75-12-7	n.d.	n.d.
4-Nonylphenoethoxylate, branched and linear (NPEO)	0.05%	--	n.d.	n.d.
Imidazolidine-2-thione	0.05%	96-45-7	n.d.	n.d.
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	0.05%	3846-71-7	n.d.	n.d.
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	0.05%	25973-55-1	n.d.	n.d.
2,4-Di-tert-butyl-6- (5-Chlor-2H-benzotriazol-2-yl) phenol (UV-327)	0.05%	3864-99-1	n.d.	n.d.
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	0.05%	36437-37-3	n.d.	n.d.
5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	0.05%	-	n.d.	n.d.
Benzo(def)chrysene (= Benzo(a)pyrene)	0.05%	50-32-8	n.d.	n.d.
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine <i>(Analytically determined via the concentrations of 2-(Ethylamino)ethanole)</i>		143860-04-2	n.d.	n.d.

No analysis necessary for the following substances

Substance name	
Aluminosilicate	<i>Ceramic fibres</i>
Zirconia aluminosilicate	

Testing of material samples for SVHC- candidate list of 20th of June 2016

1.1 Metals after total digestion in %

Test method: ICP OES according to DIN EN ISO 11885 (2009-09)
 Non-Metals and Metals: two stage microwave digestion: conc. HNO₃ / H₂O₂, inverse aqua regia solution
 Non-Metals: microwave digestion: conc. HNO₃ / H₂O₂
 Metals: microwave digestion with aqua regia solution according to DIN ISO 11466 (1997-06) complies with ISO 11466 (1995-03)

Limit of quantification (LOQ): see table

Substance name	LOQ	No. 3
Antimony (Sb)	0.01 %	n.d.
Arsenic (As)	0.01 %	n.d.
Barium (Ba)	0.01 %	n.d.
Lead (Pb)	0.01 %	n.d.
Boron (B)	0.005 %	n.d.
Cadmium (Cd)	0.01 %	n.d.
Calcium (Ca)	0.01 %	0.012
Chromium (Cr)	0.005 %	n.d.
Cobalt (Co)	0.01 %	n.d.
Potassium (K)	0.005 %	n.d.
Molybdenum (Mo)	0.01 %	n.d.
Sodium (Na)	0.008 %	0.19
Strontium (Sr)	0.01 %	n.d.
Zinc (Zn)	0.01 %	n.d.

Test method: ICP OES according to DIN EN ISO 11885 (2009-09)
 Non-Metals: microwave digestion with inverse aqua regia solution
 Metals: microwave digestion with aqua regia solution according to DIN ISO 11466 (1997-06) complies with ISO 11466 (1995-03)

Limit of quantification (LOQ): see table

Substance name	LOQ	No. 3
Tin (Sn)	0.01 %	n.d.

1.2 Chromium VI in %

Test method: Plastics: alkaline Extraction according to IEC 62321:2008* / Detection with IC-UV/VIS resp. Photometer
 Metals: Boiling water extraction according to IEC 62321:2008* / Detection with IC-UV/VIS resp. Photometer
 Textiles: Extraction with acid sweat solution according to DIN EN ISO 105-E04 (2013-08) / Detection with IC-UV/VIS resp. Photometer
 Leather: §64 LFGB B 82.02-11 resp. DIN EN ISO 17075 (2008-02) / Detection with IC-UV/VIS resp. Photometer

Limit of quantification: Plastics / Textiles / Leather: 0.001 %
 Metals: negative (<0.02 mg/kg with 50 cm²)

No. 3	n.d.
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Regarding point 1.1 and 1.2 the following concentrations result for the listed SVHCs

Substance name	CAS-No.	Calculated concentration of No. 3 (assuming the worst-case)	
Ammonium dichromate	7789-09-5	< 0.1%	
Boric acid	10043-35-3 11113-50-1	< 0.1%	
Lead chromate	7758-97-6	< 0.1%	
Sodium chromate	7775-11-3 10588-01-09	< 0.1%	
C.I. Pigment Red 104	12656-85-8	< 0.1%	
C.I. Pigment Yellow 34	1344-37-2	< 0.1%	
Potassium chromate	7789-00-6	< 0.1%	
Potassium dichromate	7778-50-9	< 0.1%	
Sodium dichromate	7789-12-0 10588-01-9	< 0.1%	
Dichromium tris(chromate)	24613-89-6	< 0.1%	
Acids generated from Chromium trioxide	Chromic acid	7738-94-5	< 0.1%
	Dichromic acid	13530-68-2	< 0.1%
	Oligomers of chromic acid and dichromic acid	--	< 0.1%
Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	< 0.1%	
Tetraboron disodium heptaoxide, hydrate	12267-73-1	< 0.1%	
Lead hydrogen arsenate	7784-40-9	< 0.1%	
Diarsenic pentaoxide	1303-28-2	< 0.1%	
Diarsenic trioxide	1327-53-3	< 0.1%	
Triethyl arsenate	15606-95-8	< 0.1%	
Calcium arsenate	7778-44-1	< 0.1%	
Arsenic acid	7778-39-4	< 0.1%	
Trilead diarsenate	3687-31-8	< 0.1%	
Lead dipicrate	6477-64-1	< 0.1%	
Cobalt dichloride	7646-79-9	< 0.1%	
Cobalt(II)sulphate	10124-43-3	< 0.1%	
Cobalt(II)dinitrate	10141-05-6	< 0.1%	
Cobalt(II)carbonate	513-79-1	< 0.1%	
Cobalt(II)diacetate	71-48-7	< 0.1%	
Chromium trioxide	1333-82-0	< 0.1%	
Strontium chromate	7789-06-2	< 0.1%	
Potassium hydroxyoctaoxidizincatedichromate	11103-86-9	< 0.1%	
Pentazinc chromate octahydroxide	49663-84-5	< 0.1%	
Lead azide, Lead diazide	13424-46-9	< 0.1%	
Lead styphnate	15245-44-0	< 0.1%	
Diboron trioxide	1303-86-2	< 0.1%	
Lead(II) bis(methanesulfonate)	17570-76-2	< 0.1%	
Fatty acids, C16-18, lead salts	91031-62-8	< 0.1%	
Acetic acid, lead salt, basic	51404-69-4	< 0.1%	
Trilead bis(carbonate)dihydroxide	1319-46-6	< 0.1%	
Lead oxide sulfate	12036-76-9	< 0.1%	
[Phthalato(2-)]dioxotrilead	69011-06-9	< 0.1%	
Dioxobis(stearato)trilead	12578-12-0	< 0.1%	
Lead bis(tetrafluoroborate)	13814-96-5	< 0.1%	
Lead cyanamidate	20837-86-9	< 0.1%	
Lead dinitrate	10099-74-8	< 0.1%	
Lead monoxide (lead oxide)	1317-36-8	< 0.1%	
Orange lead (lead tetroxide)	1314-41-6	< 0.1%	
Lead titanium trioxide	12060-00-3	< 0.1%	
Lead titanium zirconium oxide	12626-81-2	< 0.1%	
Pentalead tetraoxide sulphate	12065-90-6	< 0.1%	
Pyrochlore, antimony lead yellow	8012-00-8	< 0.1%	
Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8	< 0.1%	
Silicic acid, lead salt	11120-22-2	< 0.1%	
Sulfurous acid, lead salt, dibasic	62229-08-7	< 0.1%	
Tetraethyllead	78-00-2	< 0.1%	
Tetralead trioxide sulphate	12202-17-4	< 0.1%	
Trilead dioxide phosphonate	12141-20-7	< 0.1%	

Cadmium oxide	1306-19-0	<0.1%
Cadmium	7440-43-9	<0.1%
Cadmium sulphide	1306-23-6	<0.1%
Lead diacetate	301-04-2	<0.1%
Sodium perborate; perboric acid, sodium salt	-	<0.1%
Sodium peroxometaborate	7632-04-4	<0.1%
Cadmium chloride	10108-64-2	<0.1%
Cadmium fluoride	7790-79-6	<0.1%
Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	<0.1%
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	<0.1%
Cadmium sulphate	10124-36-4 31119-53-6	<0.1%

2. Organic substances in %

Test method:

Phthalates acc. to 12.01.02.04_Phthalate 2015-01

*Extraction with organic solvent, measurement GC/MS, LC/MS resp. GC-ECD-FID

Limit of quantification (LOQ):

see table

Substance name	LOQ	CAS-No.	No. 3
Diisobutylphthalate (DIBP)	0.05%	84-69-5	n.d.
Dibutylphthalate (DBP)	0.05%	84-74-2	n.d.
Benzylbutylphthalate (BBP)	0.05%	85-68-7	n.d.
Bis(2-ethylhexyl)phthalate (DEHP)	0.05%	117-81-7	n.d.
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (corresponds to di-iso-heptylphthalate (DIHP))	0.05%	71888-89-6	n.d.
Bis(2-methoxyethyl)phthalate (DMEP)	0.05%	117-82-8	n.d.
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (Dipentylphthalates) <i>(Analytically determined via the concentration of N-pentyl-isopentylphthalate, Diisopentylphthalate and Dipentylphthalate)</i>	0.05%	84777-06-0	n.d.
N-pentyl-isopentylphthalate	0.05%	776297-69-9	n.d.
Diisopentylphthalate	0.05%	605-50-5	n.d.
Dipentylphthalate (DPP)	0.05%	131-18-0	n.d.
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNU) <i>(Analytically determined via the concentrations of diheptyl- and diundecylphthalate)</i>	0.05%	68515-42-4	n.d.
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear <i>(Analytically determined via the concentrations of diisohexylphthalate and di-n-hexylphthalate)</i>	0.05%	68515-50-4	n.d.
Di-n-hexylphthalate (DnHP)	0.05%	84-75-3	n.d.
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters <i>(Analytically determined via the concentrations of Dihexyl-, Dioctyl-, Dedecylphthalat; contains > 0.3% Dihexylphthalate)</i>	0.05%	68515-51-5 68648-93-1	n.d.

N,N,N',N'-Tetramethyl-4,4'-methylenedianiline (Michler's base)	0.05%	101-61-1	n.d.
4,4'-Bis(dimethylamino)benzophenone (Michler's Ketone)	0.05%	90-94-8	n.d.
α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalin-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>		6786-83-0	n.d.
[4-[4,4'-Bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>		548-62-9	n.d.
[4-[[4-anilino-1-naphthyl]]4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] <i>(Analytically determined via the concentration of Michler's Ketone or Michler's Base)</i>		2580-56-5	n.d.

4,4'-Bis(dimethylamino)-4''-(methylamino)trityl alcohol [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (Analytically determined via the concentration of Michler's Ketone or Michler's Base)	561-41-1	n.d.	
4,4'- Diaminodiphenylmethane (DADPM)	0.05%	101-77-9	n.d.
Formaldehyde, oligomeric reaction products with aniline (technical MDA) (Analytically determined via the concentrations of 4,4'- Diaminodiphenylmethane (DADPM))	25214-70-4	n.d.	
Anthracene	0.05%	120-12-7	n.d.
Anthracene oils and anthracene pastes (Analytically determined via the concentration of anthracene)	90640-80-5 91995-17-4 91995-15-2 90640-82-7 90640-81-6	n.d.	
Coal tar (Analytically determined via the concentration of the sum of the 12 polycyclic aromatic hydrocarbons)	0.05%	65996-93-2	n.d.
Pentadecafluorooctanoic acid (PFOA)	0.05%	335-67-1	n.d.
Ammonium pentadecafluorooctanoate (APFO) (Analytically determined via the concentration of Pentadecafluorooctanoic acid (PFOA))	3825-26-1	n.d.	
2,4-Dinitrotoluene	0.05%	121-14-2	n.d.
Tris(2-chloroethyl)phosphate (TCEP)	0.05%	115-96-8	n.d.
Trixylyl phosphate	0.05%	25155-23-1	n.d.
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	0.05%	81-15-2	n.d.
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	0.05%	101-14-4	n.d.
o-Anisidine ; 2-Methoxyaniline;	0.05%	90-04-0	n.d.
Tributyl tin oxide (TBTO)	0.05%	56-35-9	n.d.
Dibutyltin dichloride (DBTC)	0.05%	683-18-1	n.d.
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	0.05%	2451-62-9	n.d.
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazin-2,4,6-(1H,3H,5H)-trione (β -TGIC)	0.05%	59653-74-6	n.d.
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	0.05%	1163-19-5	n.d.
6-methoxy-m-toluidine (p-cresidine)	0.05%	120-71-8	n.d.
Nitrobenzene	0.05%	98-95-3	n.d.
Direct Red 28	0.05%	573-58-0	n.d.
Direct Black 38	0.05%	1937-37-7	n.d.
4-Aminoazobenzene	0.05%	60-09-3	n.d.
o-Toluidine	0.05%	95-53-4	n.d.
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	0.05%	95-80-7	n.d.
o-aminoazotoluene	0.05%	97-56-3	n.d.
4,4'-oxydianiline and its salts	0.05%	101-80-4	n.d.
Biphenyl-4-ylamine	0.05%	92-67-1	n.d.
4,4'-methylenedi-o-toluidine	0.05%	838-88-0	n.d.
Short chain chloroparaffins C ₁₀ -C ₁₃ (SCCP)	0.05%	85535-84-8	n.d.
Hexabromocyclododecane (HBCDD)	0.05%	25637-99-4 3194-55-6	n.d.
Phenolphthaleine	0.05%	77-09-8	n.d.
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	0.05%	88-85-7	n.d.
Perfluorononan-1-oic-acid and its sodium and ammonium salts (PFNA)	0.05%	375-95-1 21049-39-8 4149-60-4	n.d.
1,3-propanesultone	0.05%	1120-71-4	n.d.
Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	0.05%	25550-51-0 19438-60-9 48122-14-1 57110-29-9	n.d.
Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	0.05%	85-42-7 13149-00-3 14166-21-3	n.d.
4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	0.05%	140-66-9	n.d.

4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO)	0.05%	--	n.d.
4-Nonylphenol, branched and linear	0.05%	--	n.d.
Henicosafleuroundecanoic acid	0.05%	2058-94-8	n.d.
Pentacosafleurotridecanoic acid	0.05%	72629-94-8	n.d.
Tricosafleurododecanoic acid	0.05%	307-55-1	n.d.
Heptacosafleurotetradecanoic acid	0.05%	376-06-7	n.d.
Methoxyacetic acid	0.05%	625-45-6	n.d.
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	0.05%	123-77-3	n.d.
Bis(2-methoxyethyl) ether	0.05%	111-96-6	n.d.
1,2-Bis(2-methoxyethoxy)ethan (TEGDME; triglyme)	0.05%	112-49-2	n.d.
1,2-Dimethoxyethane Ethylene glycoldimethylether (EGDME)	0.05%	110-71-4	n.d.
Trichloroethen	0.05%	79-01-6	n.d.
Acrylamide	0.05%	79-06-1	n.d.
2-Methoxyethanol	0.05%	109-86-4	n.d.
2-Ethoxyethanol	0.05%	110-80-5	n.d.
1,2,3-Trichloropropane	0.05%	96-18-4	n.d.
1-Methyl-2-pyrrolidone	0.05%	872-50-4	n.d.
Hydrazine	0.05%	302-01-2 7803-57-8	n.d.
2-Ethoxyethyl acetate	0.05%	111-15-9	n.d.
N,N-dimethylacetamide (DMAC)	0.05%	127-19-5	n.d.
1,2-Dichloroethane	0.05%	107-06-2	n.d.
Furan	0.05%	110-00-9	n.d.
Diethyl sulphate	0.05%	64-67-5	n.d.
Dimethyl sulphate	0.05%	77-78-1	n.d.
N-methylacetamide	0.05%	79-16-3	n.d.
Methyloxirane (Propylene oxide)	0.05%	75-56-9	n.d.
1,2-Diethoxyethane	0.05%	629-14-1	n.d.
1-bromopropane (n-propyl bromide)	0.05%	106-94-5	n.d.
N,N-dimethylformamide	0.05%	68-12-2	n.d.
Formamide	0.05%	75-12-7	n.d.
4-Nonylphenoethoxylate, branched and linear (NPEO)	0.05%	--	n.d.
Imidazolidine-2-thione	0.05%	96-45-7	n.d.
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	0.05%	3846-71-7	n.d.
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	0.05%	25973-55-1	n.d.
2,4-Di-tert-butyl-6-(5-Chlor-2H-benzotriazol-2-yl) phenol (UV-327)	0.05%	3864-99-1	n.d.
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	0.05%	36437-37-3	n.d.
5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	0.05%	-	n.d.
Benzo(def)chrysene (= Benzo(a)pyrene)	0.05%	50-32-8	n.d.
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine <i>(Analytically determined via the concentrations of 2-(Ethylamino)ethanole)</i>		143860-04-2	n.d.

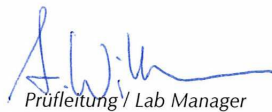
No analysis necessary for the following substances

Substance name	
Aluminosilicate	Ceramic fibres
Zirconia aluminosilicate	

Conclusion:

The item is free of hazardous substances listed in the SVHC candidate list of the REACH-regulation in a concentration greater than 0.1%. There are no obligations according to article 33 of the REACH-regulation.

Intertek Consumer Goods GmbH



Prüfleitung / Lab Manager

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