

Annex A bij Bijlage 6.1 Programma van Eisen

Betreft: tabellen aangaande eis 20.



1.1. Tinorganic substances

Substance	CAS-No.	CertiPUR Standard Limit (ppb)	LOQ [ppb]
Tributyltin (TBT)		< 50	5
Dibutyltin (DBT)		< 100	5
Monobutyltin (MBT)		< 100	5
Tetrabutyltin (TeBT)			
Monooctyltin (MOT)			
Dioctyltin (DOT)			
Tricyclohexyltin (TcyT)			
Triphenyltin (TPhT)			
Sum*		< 500	50

Test method

The sample must be a composite of 6 pieces to be taken from beneath each sample face (to a maximum of 2 cm from the surface). The sample is cut and extracted for 1 hour with the extracting agent** in an ultrasonic bath at room temperature. After extraction the alkyl tin species are derivatized by adding sodium tetraethylborate solution in THF. The derivative is then extracted with n-hexane. The sample is then submitted to a second extraction procedure. Both hexane extracts are combined and further used to determine the organotin compounds by gas chromatography with mass selective detection in SIM modus.

* Besides the CertiPUR limit for the individual organic tin substances MBT, DBT and TBT, a specification limit is also set for the sum of n-butyltin, di-n-butyltin, tri-n-butyltin, tetra-n-butyltin, n-octyltin, di-n-octyltin, tri-cyclohexyltin and tri-phenyltin

** Extracting agent: 250 ml buffer*** + 1750 ml methanol + 300 ml acetic acid

*** Buffer (pH 4,5): 164 g sodium acetate + 1200 ml water + 165 ml acetic acid, to be diluted to 2000 ml with water



1.2. Phthalate plasticizers

Substance	CAS-No.	CertiPUR Standard Limit	LOQ [ppm]
Sum of 7 phthalates°:		≤ 0.01 wt %	50
Di-iso-nonylphthalate	28553-12-0		
Di-n-hexylphthalate	84-75-3		
Di-n-octylphthalate	117-84-0		
Di (2-ethylhexyl)-phthalate	117-81-7		
Di-iso-decylphthalate	26761-40-0		
Butylbenzylphthalate	85-68-7		
Dibutylphthalate	84-74-2		

°Note: see also section 2.3

Test method

Soxhlet extraction with dichloromethane using validated method and followed by analysis with GC/MS or HPLC/UV.

The sample must be a composite of 6 pieces to be taken from beneath each sample face (to a maximum of 2cm from the surface).

1.3. TDA or MDA (resp. for TDI or MDI based foam)

Substance	CAS-No.	CertiPUR Standard Limit	LOQ
2,4 Toluenediamine (2,4 TDA)	95-80-7	≤ 5.0 ppm	0,5 ppm
4,4' Diaminodiphenylmethane (4,4' MDA)	101-77-9	≤ 5.0 ppm	0,5 ppm

Test method

Extraction with 1 % aqueous acetic acid solution. The sample must be a composite of 6 pieces to be taken from beneath each sample face (to a maximum of 2 cm from the surface). Four repeat extractions of the same foam sample must be performed maintaining the sample weight to volume ratio of 1:5 in each case. The extracts are combined, made up to a known volume, filtered and analysed by HPLC-UV or HPLC-MS. If HPLC-UV is performed and interference is suspected, reanalysis with HPLC-MS should be performed.



2. Substances that are prohibited

Applicant companies **must declare** they do not add the following substances. It is however not excluded that impurities may be present unintentionally. See following tables for further details by category.

2.1. Heavy metals

The Applicant declares that he does not intentionally add substances that may, to actual knowledge, result in the foam having extractable heavy metal concentrations above those given in the table below.

Substance	CAS-No.	EUROPUR Standard Limit [ppm] (mg/kg of foam)
Antimony (Sb)	7440-36-0	0.5
Arsenic (As)	7440-38-2	0.2
Cadmium (Cd)	7440-43-9	0.1
Chromium total (Cr)	7440-47-3	1.0
Chromium VI (Cr VI)	18540-29-9	0.01
Cobalt (Co)	7440-48-4	0.5
Copper (Cu)	7440-50-8	2.0
Lead (Pb)	7439-92-1	0.2
Nickel (Ni)	7440-20-0	1.0
Mercury (Hg)	7439-97-6	0.02
Selenium (Se)	7782-49-2	0.5



2.3. Phthalate plasticizers

The Applicant declares that he does not intentionally add phthalates to the foam formulation.

Note: The Certipur standard prohibits the intentional addition of any phthalates to the foam formulation. However phthalates traces may be found even when not intentionally added. Therefore the maximum limit of the sum of the phthalates mentioned in §1.2 is limited to ≤ 0.01 wt % by measurement.



2.7. Other prohibited substances

Substance	CAS-No.
Chlorinated or brominated dioxines or furans	
Chlorinated hydrocarbons (1,1,2,2-Tetrachloroethane, Pentachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethylene)	
Chlorinated phenols (PCP, TeCP)	87-86-5
Hexachlorocyclohexane	58-89-9
Monomethyldibromo- Diphenylmethane	99688-47-8
Monomethyldichloro- Diphenylmethane	81161-70-8
Nitrites	
Polybrominated Biphenyls (PBB)	59536-65-1
Pentabromodiphenyl Ether (PeBDE)	32534-81-9
Octabromodiphenyl Ether (OBDE)	32536-52-0
Polychlorinated Biphenyls (PCB)	1336-36-3
Polychlorinated Terphenyls (PCT)	61788-33-8
Tri-(2,3-dibromo-propyl)-phosphate (TRIS)	126-72-7
Trimethylphosphate	512-56-1
Tris-(aziridiny)-phosphin oxide (TEPA)	5455-55-1
Tris(2-chloroethyl)-phosphate (TCEP)	115-96-8
Dimethyl methylphosphonate (DMMP)	756-79-6
Biocides	Except those authorized by the Biocidal Products Regulation EU/528/2012 and its amendments

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