

Declaration: 7.2 a) Polyurethane (PUR) foam: Restricted substances and mixtures

to be completed by the PUR foam Manufacturer/Applicant, as appropriate

I the undersigned, declare the following statements and results below are accurate and comply with the requirements of criterion 7.2(a) of Commission Decision (EU) 2016/1332/EU for EU Ecolabel furniture substances/mixtures have not been intentionally added to the polyurethane foam supplied to _____ (please insert the name of the applicant):

- That no biocidal products have been intentionally used.
- That no flame retardants have been intentionally used (unless in accordance with the conditions laid out in entries b) and c) of the derogation table in criterion 2.2 of Commission Decision (EU) 2016/1332).
- That no phthalate plasticisers listed on the ECHA candidate list have been intentionally used.
- That none of the following substances have been intentionally added: *Chlorinated or brominated dioxins 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); Tris(2,3-dibromopropyl) phosphate (TRIS, 126-72-7); Trimethylphosphate (512-56-1); Tris-(aziridiny)-phosphin oxide (TEPA, 545-55-1); Tris(2-chloroethyl)-phosphate (TCEP, 115-96-8); Dimethyl methylphosphonate (DMMP, 756-79-6).*

I also confirm that the analytical test results for the following compounds in the PUR foam are as follows and use the methodology described. I also attach copies of the test reports.

Substance group	Substance (acronym, CAS number)	Limit value	Test Method	Test Result
Heavy Metals	As (Arsenic)	0.2 ppm	Milled sample material is eluted in accordance with DIN 38414-S4 or equivalent in a ratio of 1:10. The resultant filtrate shall be passed through a 0.45 µm membrane filter (if necessary by pressure filtration). The solution obtained shall be examined for the content of heavy metals by atomic emission spectrometry with inductively coupled plasma (ICP-AES or ICP-OES) or by atomic absorption spectrometry using a hydride or cold vapour process	
	Cd (Cadmium)	0.1 ppm		
	Co (Cobalt)	0.5 ppm		
	Cr (Chromium), total	1.0 ppm		
	Cr VI (Chromium VI)	0.01 ppm		
	Cu (Copper)	2.0 ppm		
	Hg (Mercury)	0.02 ppm		
	Ni (Nickel)	1.0 ppm		
	Pb (Lead)	0.2 ppm		
	Sb (Antimony)	0.5 ppm		
Se (Selenium)	0.5 ppm			
Plasticizers	Dibutylphthalate (DBP, 84-74-2)*	0.01% w/w (sum of all 6 phthalates in furniture for children <3 years old) *0.01% w/w (sum of 4 phthalates in all other furniture products)	Extraction shall be performed using a validated method such as the subsonic extraction of 0.3 g of sample in a vial with 9 ml of t-Butylmethylether during 1 hour followed by the determination of phthalates by GC using a single ion monitoring mass selective detector (SIM Modus).	
	Di-n-octylphthalate (DNOP, 117-84-0)*			
	Di (2-ethylhexyl)-phthalate (DEHP, 117-81-7)*			
	Butylbenzylphthalate (BBP, 85-68-7)*			
	Di-iso-decylphthalate (DIDP, 26761-40-0)			
	Di-iso-nonylphthalate (DINP, 28553-12-0)			
TDA and MDA	2,4 Toluenediamine (2,4-TDA, 95-80-7)	5.0 ppm	Extraction of a 0.5 g composite sample in a 5ml syringe shall be performed with 2.5 ml of	

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	4,4'-Diaminodiphenylmethane (4,4'-MDA, 101-77-9)	5.0 ppm	1% aqueous acetic acid solution. The syringe is squeezed and the liquid returned to the syringe. After repeating this operation 20 times, the final extract is kept for analysis. A new 2.5ml of 1% aqueous acetic acid is then added to the syringe and another 20 cycles repeated. After this, the extract is combined with the first extract and diluted to 10 ml in a volumetric flask with acetic acid. The extracts shall be analysed by high-performance liquid chromatography (HPLC-UV) or HPLC-MS. If HPLC-UV is performed and interference is suspected, reanalysis with high performance liquid chromatography-mass spectrometry (HPLC-MS) shall be performed	
Tinorganic substances	Tributyltin (TBT)	50 ppb	A composite sample of 1-2 g weight shall be mixed with at least 30ml of extracting agent during 1 hour in an ultrasonic bath at room temperature. The extracting agent shall be a mixture composed as follows: 1750 ml methanol + 300 ml acetic acid + 250 ml buffer (pH 4.5). The buffer shall be a solution of 164 g of sodium acetate in 1200 ml of water and 165 ml acetic acid, to be diluted with water to a volume of 2000 ml. After extraction the alkyl tin species shall be derivatized by adding 100 µl of sodium tetraethylborate in tetrahydrofuran (THF) (200 mg/ml THF). The derivative shall be extracted with n-hexane and the sample shall be submitted to a second extraction procedure. Both hexane extracts shall be combined and further used to determine the organotin compounds by gas chromatography with mass selective detection in SIM modus	
	Dibutyltin (DBT)	100 ppb		
	Monobutyltin (MBT)	100 ppb		
	Tetrabutyltin (TeBT)	-		
	Monooctyltin (MOT)	-		
	Diocetyl tin (DOT)	-		
	Tricyclohexyltin (TcyT)	-		
	Triphenyltin (TPhT)	-		
	Sum	500 ppb		
Signature of person bearing legal responsibility				
Position held				
Company Name in CAPITALS:				
Date:				
Company Stamp:				

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Declaration: 7.2 b) Polyurethane foam: 72h VOC emissions

to be completed by the PUR foam Manufacturer/Applicant, as appropriate

I the undersigned, declare the following statements and results below are accurate and comply with the requirements of criterion 7.2(b) of Commission Decision (EU) 2016/1332 for EU Ecolabel furniture substances/mixtures have not been intentionally added to the polyurethane foam supplied to

_____ (please insert the name of the applicant):

Substance (CAS number)	Limit (mg/m ³)	Test Method	Result (mg/m ³)
Formaldehyde (50-00-0)	0.005	<p>The test sample/chamber combination shall be either: 1 sample of 25x20x15 cm dimensions is placed in a 0.5 m³ test chamber or 2 samples of 25x20x15 cm dimensions are placed in a 1.0 m³ test chamber. The foam sample shall be placed on the bottom of an emission test chamber and conditioned for 3 days at 23 °C and 50% relative humidity, applying an air exchange rate n of 0.5 per hour and a chamber loading L of 0.4 m²/m³ (= total exposed surface of sample in relation to chamber dimensions without sealing edges and back) in accordance with ISO 16000-9 and ISO 16000-11. Sampling shall be done 72 ± 2 h after loading of the chamber during 1 hour via Tenax TA and DNPH cartridges for VOC and formaldehyde analysis respectively. The emissions of VOC are being trapped on Tenax TA sorbent tubes and subsequently analysed by means of thermo-desorption-GC-MS in accordance to ISO 16000-6. Results are semi-quantitatively expressed as toluene equivalents. All specified individual components are reported from a concentration limit ≥ 1 µg/m³. Total VOC value is the sum of all components with a concentration ≥ 1 µg/m³ and eluting within the retention time window from n-hexane (C6) to n-hexadecane (C16), both included. The sum of all detectable compounds classified as categories C1A or C1B according to Reg (EC) No 1272/2008 is the sum of all these substances with a concentration ≥ 1 µg/m³. In case the test results exceed the standard limits, substance specific quantification needs to be performed. Formaldehyde can be determined by collection of the sampled air onto DNPH cartridge and subsequent analysis by HPLC/UV in accordance to ISO 16000-3. Testing following the standard CEN/TS 16516 shall be considered as equivalent to those of the ISO 16000 series of standards.</p>	
Toluene (108-88-3)	0.1		
Styrene (100-42-5)	0.005		
Each detectable compound classified as categories C1A or C1B according to the Regulation (EC) No 1272/2008	0.005		
Sum of all detectable compound classified as categories C1A or C1B according to Regulation (EC) No 1272/2008	0.04		
Aromatic hydrocarbons	0.5		
VOCs (total)	0.5		
Signature of person bearing legal responsibility			
Position held			
Company Name in CAPITALS:			
Date:			
Company Stamp:			

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Declaration: 7.2(c) Blowing agents*to be completed by the PUR foam supplier*

I the undersigned, hereby declare that no halogenated blowing agents (which explicitly include any CFCs, HCFCs and HFCs) have been used in the manufacture of the _____ (**insert product name**) PUR foam product supplied to _____ (**insert name of applicant**).

Signature of person bearing legal responsibility	
Position held	
Company Name in CAPITALS:	
Date:	
Company Stamp:	