



## Specific Guideline

Authorization for marking with INSPECTED QUALITY for “Criteri Ambientali Minimi” for  
Polyurethane Foam





## Content

1	Scope .....	3
2	Requirements .....	3
2.1	Use of biocide .....	3
2.2	Extractable Heavy metals .....	3
2.3	Phthalates .....	4
2.4	TDC / MDA (for foams based on TDI respectively MDI) .....	4
2.5	Tin Organic Compounds .....	5
2.6	Emission .....	5
2.7	Colorants .....	6
2.8	Total content of chlorine of Isocyanate .....	6
2.9	Blowing agents .....	6
2.10	Substances with certain H-phrases .....	6
2.11	Other substances .....	7
3	Validity of the labelling authorization .....	7
4	Documents in compliance with this Directive .....	7

## Imprint

Media owner and editor:  
OETI-Institute for Ecology, Technology and Innovation  
Siebenhirtenstrasse 12A / Objekt 8  
1230 Vienna  
AUSTRIA

Publication: Vienna  
Publishing + Print: Own copy

Edition: 04/2022\_V1.0

OETI - Institut fuer Oekologie, Technik und Innovation GmbH | Siebenhirtenstrasse 12A, Objekt 8, 1230 Vienna, Austria  
tel +43 1 5442543-0 | e-mail office@oeti.biz | www.oeti.biz | FN 326826 b | VAT No. ATU65149029 | EORI ATEOS1000015903  
Raiffeisenlandesbank Niederösterreich-Wien AG | IBAN AT723200000013108725 | BIC RLNWATWW  
UniCredit Bank Austria AG | IBAN AT941200023410378800 | BIC BKAUATWW  
Es gelten ausschließlich unsere Allgemeinen Geschäftsbedingungen | Only our general terms and conditions apply



## 1 Scope

This guideline applies to polyurethane foams to meet the criteria for the INSPECTED QUALITY label to fulfil the requirements for “**MINIMUM ENVIRONMENTAL CRITERIA, Restricted substances and related verification criteria published in the Official Gazette of the Italian Republic on 28/01/2017**”

## 2 Requirements

For the authorization to label polyurethane foams with the INSPECTED QUALITY – “Criteri Ambientali Minimi” - the products must meet the following criteria:

### 2.1 Use of biocide

Only biocides which are accepted under the regulation EU/528/2012 are allowed to be used. A self-declaration has to be submitted within the application.

### 2.2 Extractable Heavy metals

Metal	Limit value (mg/kg)
Antimony (Sb)	0,5
Arsenic (As)	0,2
Cadmium (Cd)	0,1
Cobalt (Co)	0,5
Chromium total (Cr)	0,5
Chromium VI (Cr VI)	1,0
Mercury (Hg)	0,02
Nickel (Ni)	1,0
Lead (Pb)	0,2
Copper (Cu)	2,0
Selenium (Se)	0,5

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application.



### 2.3 Phthalates

Substance	Limit value
Sum of 7 phthalates	≤ 0,1%
Benzylbutylphthalate (BBP) (CAS 85-68-7)	
Dibutylphthalate (DBP) (CAS 84-74-2)	
Di-(2-ethylhexyl)phthalate (DEHP) (CAS 117-81-7)	
Diethylphthalate (DEP) (CAS 84-66-2)	
Di-iso-decylphthalate (DIDP) (CAS 26761-40-0)	
Di-iso-nonylphthalate (DINP) (CAS 28553-12-0)	
Di-n-octylphthalate (DNOP) (CAS 117-84-0)	

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application. Testing has to be performed with GC/MS or HPLC/UV. Sampling and extraction shall be done as a mixture of 6 pieces which are taken from the inside of the foam (max. 2cm from the surface).

### 2.4 TDC / MDA (for foams based on TDI respectively MDI)

Substance	Limit value mg/kg
2,4 Toluenediamine (2,4 TDA) (CAS 95-80-7)	≤ 5,0
4,4'-Diaminodiphenylmethane (4,4' MDA) (CAS 101-77-9)	≤ 5,0

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application. Sampling and extraction shall be done as a mixture of 10 pieces which are taken from the inside of the foam (max. 2cm from the surface). Test is done according "CAM point II.4"



## 2.5 Tin Organic Compounds

Substance	Limit value mg/kg
Tributyltin (TBT)	< 50
Dibutyltin (DBT)	< 100
Monobutyltin (MBT)	< 100
Tetrabutyltin (TeBT)	
Monooctyltin (MOT)	
Dioctyltin (DOT)	
Tricyclohexyltin (TCyHT)	
Triphenyltin (TPhT)	
<b>Sum</b>	< 500

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application. Sampling and extraction shall be done as a mixture of 6 pieces which are taken from the inside of the foam (max. 2cm from the surface). Test is done according “CAM point II.5”

## 2.6 Emission

Substance	Limit value µg/mg <sup>3</sup>
Formaldehyde (CAS 50-00-0)	10
Toluene (CAS 108-88-3)	100
Styrene (CAS 100-42-5)	5
CMR substances class 1a and 1b *	5
Sum CMR substances class 1 and 1b **	40
Aromatic volatile compounds	500
VOC total	500

\*in conformance with EU legislation

\*\*including formaldehyde

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application. Test shall be performed according ISO16000 series after 72 ± 2h.

Testing chamber: 0.5 – 1m<sup>3</sup>

Sample size: 25 x 20 x 15cm



## 2.7 Colorants

Arylamines (released from Azo colorants or in free manner) (Directive 2002/61/CE), Hazardous colorants (Carcinogenic, allergenic) (Directive CE 1907/2006 and Directive CE1896/2000).

A test report from an accredited laboratory which is not older than 6 month shall be submitted with the application.

## 2.8 Total content of chlorine of Isocyanate

The total content of chlorine shall not be  $> 0,07\%$ .

Evidence is a self-declaration with an explanation of the production steps that this limit is not exceeded.

## 2.9 Blowing agents

It is not allowed to use and Chlorofluoroalkanes (CFCs), Hydrochlorofluoroalkanes (HCFCs) and halogenated hydrocarbons as blowing agent.

Evidence is a self-declaration that these substances are not used as well as the list of used chemicals for production.

## 2.10 Substances with certain H-phrases

Substances with following H-phrases are not allowed to be used in the production:

H340 - May cause genetic defects

H350 - May cause cancer

H360 - May damage fertility or the unborn child

H370 - Causes damage to organs

Evidence is a self-declaration that these substances are not used as well as the Safety Data Sheets of used chemicals.



### 2.11 Other substances

Following substances shall not be used in production:

Substance
Chlorinated or brominated dioxines or furanes
Hydrocarbons, Pentachlorooctan;, 1,1,2 Trichlorooctane; 1,1,2,2 Tetrachlorooctane; 1,1 Dicloroethylene
Chlorinated phenols (PCP, TeCP) (CAS 87-86-5))
Hexachlorocyclohexane (CAS 58-89-9)
Monomethyldibromo-di -phenylmethane(CAS 99688-47-8)
Monomethyldichlorodiphenylmethane (CAS 126-72-781161-70-8)
Nitrite
Polybromobiphenyles (PBB´s) (CAS 9536-65-1; CAS 1336-36-3)
Pentabromodiphenylethers (PentaBDE) (CAS 32534-81-9)
Octabromobiphenyls (CAS 32536-52-0)
Polychlorinatedterphenyls (PCT) (CAS 61788-33-8)
Tri-(2,3-dibromopropyl)phosphate (TRIS) (CAS 126-72-7)
Trimethylphosphphate (CAS 512-56-1)
Tri-(2,3-dibromopropyl)phosphate (TRIS) (CAS 126-72-7)
Tris(2-chlorethyl)phosphate (TCEP) (CAS 115-96-8)
Dimethylmethylphosphonat (DMMP) (CAS 756-79-6)

Evidence is a self-declaration that these substances are not used as well as the Safety Data Sheets of used chemicals.

### 3 Validity of the labelling authorization

The authorization is valid for one year. Re-certification is necessary for the further awarding of the qualifying right.

### 4 Documents in compliance with this Directive

- INSPECTED QUALITY Application form
- INSPECTED QUALITY Declaration of Conformity
- INSPECTED QUALITY Labelling