

Guidance on sampling of construction products for the emission test

These notes apply to the sampling of construction products in the manufacturing plant which shall be tested and assessed according to the "*Grundsätze zur gesundheitlichen Bewertung von Bauprodukten in Innenräumen*" ('Principles for the health assessment of construction products used in interiors') and in the framework of the determinations for the third party surveillance in accordance with an "*allgemeine bauaufsichtliche Zulassung*" ('national technical approval').

1 General rules

Basically, it should be noted that influences such as:

- heat
- intensive light
- excessive humidity
- cleaning agents
- combustion gas
- as well as solvents from paints, varnishes, fuels and the like

may adulterate the result of the test and/or contaminate the sample. In order to avoid contamination of the test specimens as far as possible, the determinations laid down in the following sections shall be taken into account.

When taking a sample, the sampling protocol shall be filled in according to annex 1a) or 1b) and shall be transmitted to the testing laboratory.

"Prototypes" are to be manufactured in such a way that they represent the products to be regulated in the scope of the approval applied for, at least concerning their chemical composition, their structure and dimensions (in consideration of usual tolerances).

2 Age of sample

In case of approval tests:

Immediately after having reached merchantability¹, the sample shall be drawn and packed (see point 4). The product can be stored either at the manufacturer or the testing laboratory. The product has to be stored in low-emission packaging and under normal climatic room conditions. After the sample has reached merchantability the approval test shall start within 8 weeks.

In case of containers:

Containers shall always be delivered to the testing laboratory tightly closed. The testing laboratory is responsible to ensure that the expiration date is not exceeded.

In case of surveillance tests²:

Samples shall always be taken from the most recently produced batch. After having reached merchantability the sample shall be drawn and packed in the manufacturing plant within 3 months. The product can be stored either at the manufacturer or the testing laboratory. The product shall be stored in low-emission packaging and under normal climatic room conditions. After the sample has reached merchantability the surveillance test shall start within 4 months.

¹ Merchantability means the state of being fit for the placing on the market; e.g. linoleum floor coverings have reached their merchantability when the ripening process is completed.

² Samples for surveillance tests must be taken by a recognized testing laboratory, inspection body and certification body (abbreviation: TIC body) according to the codes of the states of Germany.

An exception applies to products which are rarely produced. The sample shall be drawn by the manufacturer immediately after reaching merchantability. The product can be stored either at the manufacturer or the laboratory. The product shall be stored in low-emission packaging and under normal climatic room conditions. The sample shall be placed into the emission chamber by the TIC body³ promptly after the official sampling.

In case of containers:

Containers always shall be delivered to the testing laboratory tightly closed. The testing laboratory is responsible to ensure that the expiration date is not exceeded.

3 Sample size / sampling

With respect to sampling from a reel, one meter or at least the outer layer of the reel shall be unrolled. From the subsequent surface 1.0 to 1.5 meters are to be taken as a sample. The sample shall not exceed two meters in width. Subsequently, the sample is wound across the original winding direction with the backing turned outwards. The sample shall be protected against unwinding with clips or cords, in no case, however with adhesive tapes.

When sampling tiles of textile or elastic floor coverings or laminates, planks or parquets, a complete packing unit shall be taken. If the packing unit is not shippable due to its size, then four tiles (or optionally more in case of smaller tiles) and/or hard covers in pairs – top side on top side – shall be taken from the middle of the packing unit. Textile and elastic tile floor coverings may not be wound.

Coatings and adhesives are to be delivered to the testing laboratory in original containers closed at the manufacturing plant. The minimum durability stated on the container may not be exceeded until the production of the test specimen.

When the sampling is completed, the sample shall be packed within one hour as described below.

4 Packaging

The samples must be carefully protected from chemical contamination or physical influences, such as heat, light and humidity. For this purpose, the sample or packing unit is wrapped up in aluminium foil and subsequently packed and sealed in a plain air-tight polyethylene bag. As an alternative, aluminized packing material is also suitable (see point 7). In order to avoid contamination, the packaging will either be sealed as air-tight as possible with a foil welding device or with a low-emission adhesive tape. Samples to be tested separately, shall be packed individually to prevent mutual contamination.

5 Marking samples

Samples shall be labelled with the exact information such as the type of product, the date of manufacture (if known) and/or the identification or batch number. No solvent-containing writing utensils shall be used to mark samples. Instead, self-adhesive labels are suitable, which can be labeled with a ballpoint pen and affixed as close as possible to the edge of the test specimen. The sample and wrapping are to be marked identically. The marking given by the client shall be stated in the test report.

6 Transport / shipping / storage

Common parcel and courier services can be entrusted with the dispatch. During transport, the sample shall not be stored in the vicinity of solvent-containing materials (e.g. spare cans).

If the samples are not being tested directly after the production/packaging, they can also be stored at the manufacturing plant under suitable storage conditions. The storage conditions shall be assessed by the TIC body. If these testing laboratories or bodies have any doubt about the storage conditions, appropriate countermeasures shall be enforced in agreement with the manufacturer.

³ TIC body: testing laboratory, inspection body and certification body; in German: "Prüf- Überwachungs- und Zertifizierungsstelle", abbreviation: "PÜZ-Stelle"

7 Sources of supply for suitable packing material

Aluminium composite film E 100:

Flöter Flexibles GmbH, Daimlerstr. 5, 71735 Eberdingen, Tel.: +49 (0) 7042/9526-0, <http://www.floeter.com>

Aluminium foil 0.3 mm extra strong from the company Neolab

<http://www.neolab.de>

<http://www.mercateo.com>

Aluminium foil

W. Bosch GmbH & Co. KG Papier- und Folienwerke, Wasserfuhr 6, 51688 Wipperfürth,
Tel: +49 (0) 2267 / 88220; <http://www.w-bosch.de>

The list of suitable packing materials is updated by the DIBt. If other packing materials are used, the testing laboratory, the TIC body and/or the DIBt should be asked.

Annex 1a): Report of the sampling procedure for floor coverings, underlays and components for surfaces for sports areas

Name of the applicant (address/ stamp):		Manufacturer of the product (if deviating from the applicant):	
Factory in which the sample is taken:		Sample drawer (please mark): Name, company, telephone:	<input type="checkbox"/> testing laboratory <input type="checkbox"/> inspection body <input type="checkbox"/> manufacturer

Name of the product:		Type of floor covering (e.g.. laminate, textile floor covering, PVC floor covering)	
Model / programm / series:		Batch-N°.::	
Article-N°.::		Date of batch production:	

Date of sampling:		Time of day:	
Sample is taken from	<input type="checkbox"/> the current production <input type="checkbox"/> store <input type="checkbox"/> retain samples	How had the product been stored prior to sampling?	<input type="checkbox"/> open <input type="checkbox"/> wrapped up
Place of storage:		Type of packing / packing material	

Particularities (possible negative effects due to emissions at the place of sampling, fuel emissions, solvent emissions from the production, uncertainties, questions, etc.):	
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Intended tests:
<input type="checkbox"/> Emission test DIBt (approval test) <input type="checkbox"/> Emission test DIBt (surveillance test)
<input type="checkbox"/> Design characteristics
<input type="checkbox"/> Other (PAK, nitrosamine, etc.)

Confirmation	
The signer herewith confirms the correctness of the data given above. The sample was selected, drawn and packed personally in accordance with the sampling instructions.	
Date:	Signature: (Stamp)

* You are requested to fill in one sampling report per sample!

Annex 1b): Report of the sampling procedure for coatings, adhesives and components for surfaces for sports areas

Name of the applicant (address / stamp):		Manufacturer of the product (if deviating from the applicant):	
Factory in which the sample is taken:		Sample drawer (please mark):	<input type="checkbox"/> testing laboratory <input type="checkbox"/> inspection body <input type="checkbox"/> manufacturer
		Name, company, telephone:	
Name of the product:		Designated use (e.g. primer, top coat, etc.):	
Degree of gloss / color shade, etc.:			
Article-N°:		Batch-N°:	
Information on the durability:		Date of batch production:	
Date of sampling:		Form of the bundle:	
Time of day:		Volume:	
Particularities (uncertainties, questions, etc.):			
Intended tests:			
<input type="checkbox"/> Emission test DIBt (approval test) <input type="checkbox"/> Emission test DIBt (surveillance test) <input type="checkbox"/> Other (PAK, Nitrosamine, etc.)			
Confirmation			
The signer herewith confirms the correctness of the data given above. The sample was selected, drawn and packed personally in accordance with the sampling instructions.			
Date:	Signature: (Stamp)		

* You are requested to fill in one sampling report per sample!