

# Obligatory inspection of components for drinking water

## **The Danish Building regulations 2008, article 8.4.1. paragraph 6:**

*Factory-made products used in or connected to plumbing systems must be certified by the Danish Enterprise and Construction Authority through ETA-Danmark A/S, unless the product concerned is exempted in accordance with the provisions on the certification scheme in force from time to time. This provision applies to characteristics which affect the quality of drinking water as defined by the executive order on water quality and supervision of water supply systems issued by the Ministry of the Environment and Energy.*

The Danish Enterprise and Construction Authority has, by letter of 25 April 2008, required that ETA-Danmark, on 1 April 2008 introduces an extension of the conditions for VA approvals of taps and other products needing approval so that these will in future be subject to obligatory inspection. A copy of the above-mentioned letter can be found on ETA-Danmark's website. The purpose of the control is that, during the approval period, it must be documented that the requirements relating to threshold values for liberation of harmful substances are met.

## **Products embraced by the obligatory inspection**

Mixer taps and components utilized in connection with drinking water and made of brass alloys, including components containing plastic parts that are in contact with drinking water<sup>1</sup> and do not have a separate VA approval. Products made of stainless steel are not included in the obligatory inspection.

## **Control agreement**

Referring to the requirements from The Danish Enterprise and Construction Authority, ETA-Danmark requires that a control agreement is made between the approval holder and an accredited inspection and testing body. It is a condition of the issue and renewal of the VA approval that a signed control agreement exists.

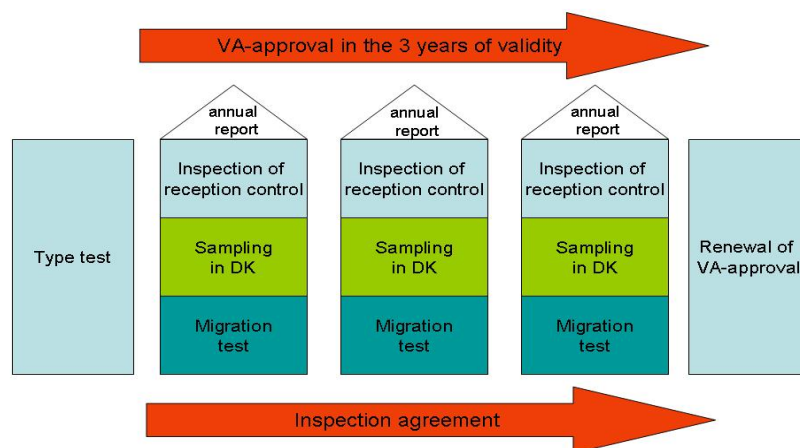
The approval holder must, when the agreement is signed, state where the samples can be taken in Denmark and where the approval holder's reception control/production takes place. If a centrally placed location for distribution of the products does not exist, it is possible to refer to a website containing an updated list of retailers.

## **Procedure for random sampling**

The obligatory random sampling includes three elements: inspection, sampling and migration testing.

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1) <sup>1</sup> If more than 10 % of the total surface that is in contact with water is made of plastic and the contact time is more than 30 minutes.



## Inspection

Inspection is carried out annually at the manufacturer/retailer/wholesaler in Denmark. The inspection is targeted at the reception control or the production and is to ensure that there is agreement between the product and the applicable VA approval.

As a minimum the following registrations must be carried out in relation to each shipment/batch per product:

- Registration of the number of received products.
- It is checked whether the product has an applicable VA approval (can be checked on ETA-Danmark's website or [www.godkendtevandhaner.dk](http://www.godkendtevandhaner.dk)).
- It is checked if any connecting hoses and other plastic parts are VA approved.
- It is checked whether the packaging has been supplied with the correct VA number.
- The mixer tap is weighed without connecting hoses, and the weight is registered and compared to the previous shipment.
- The enclosed material certificate relating to brass parts is filed and compared to the previous material certificate.

Registrations must be kept on file for 10 years.

## Sampling

Sampling is carried out at the same time as the inspection. A representative section of the product programme is selected for testing of liberation of lead and cadmium to drinking water. The number of samples depends on the number of approved products and the division into sample families. This is defined in annex A.

The division into sample families is carried out in cooperation with the approval holder in connection with the first inspection and files are regularly updated during the inspections. As far as possible, different samples should be taken at each inspection.

Sampling takes place at one of the given locations. The approval holder is responsible for possible internal settlements. Tested products are returned to the address where they were taken.

### **Migration testing**

The selected products are tested for liberation of lead and cadmium to drinking water in relation to the Nordic product rules NKB 4<sup>2</sup>. Testing must be carried out by an accredited laboratory.

### **Report**

A report is prepared containing a conclusion of the inspection and the result of the migration tests. The report is forwarded electronically to the approval holder with a copy to ETA-Danmark A/S.

### **Contractual terms**

The agreement is established directly between the inspection body and the approval holder. Costs relating to inspection and sampling are not included in the fee for the VA certification and cannot be invoiced to ETA-Danmark A/S.

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<sup>2</sup> The Danish Enterprise and Construction Authority can later include more analyses in the testing. Please note that these tests may be destructive.

## Annex A

The table below is a tool that ensures that a representative selection of the approval holder's programme is chosen when random sampling is carried out and that various mixer taps are selected during the approval period. The table is also included in the report submitted to ETA Denmark A/S.

**WB** = Wash basin **KS** = Kitchen sink **PH**= Pull out hose

VA approval no.	Single lever mixer			Double lever mixer			Electronic operated mixer			Included in sample family	Latest sampling date			
	WB	KS	PH	WB	KS	PH	WB	KS	PH		Year			
17123		<b>x</b>								<b>1</b>	07			
17124		<b>x</b>								<b>1</b>		08		
17125		<b>x</b>								<b>1</b>				
17130	<b>x</b>									<b>2</b>	07			
18111							<b>x</b>			<b>3</b>	07			
18112					<b>x</b>					<b>4</b>	07			
13211							<b>x</b>			<b>3</b>		08		
13212		<b>x</b>								<b>1</b>				
13213	<b>x</b>									<b>2</b>		08		
13214			<b>x</b>							<b>5</b>	07			
15618		<b>x</b>								<b>1</b>				
15619		<b>x</b>								<b>1</b>				
16456	<b>x</b>									<b>2</b>				
16457					<b>x</b>					<b>4</b>		08		
16458			<b>x</b>							<b>4</b>		08		

1. The mixer taps are divided into three categories: 'One handle', 'Two handles', and 'Electronically activated'.
2. These three categories are divided into 'Wash basin', 'Kitchen sink' and 'Mixer taps with pull out hoses'.
3. The boxes in the columns are ticked in the category that the product and the approval number belongs to.
4. The random sample families are numbered continually in the column to the right.
5. Maximum nine sample families can be defined.
6. If a random sample family includes more than 10 products, one random sample is taken for each commenced decade.
7. As far as possible, the random samples should alternate between different products during the approval period.