Appendix III. Provisions for containers and container materials of plastic for drinking water storage

TEST BASIS

The migration testing for the type test must be performed in compliance with the applicable version of DK-VAND's test requirements for container materials of plastic.

1. Samples for migration testing

During the certification audit, samples are selected as described in DK-VAND's test requirements for container materials of plastic.

Subsequently, at least one sample is selected for audit testing every year.

When sampling, it must be ensured that various dimensions and types of the products are selected.

Before selecting the samples for audit testing, the certificate holder must contact the toxicological consultant in order to clarify whether the test outline requires updating.

The test set-up is performed in compliance with Appendix 1 of DK-VAND's test requirements for containers of plastic materials.

2. Samples for audit testing

During the sampling, the following information must be recorded for each individual sample and be included in the analysis report:

1. Product name
2. Product number or ID
3. Dimension and pressure class
4. Production site, batch number and date of manufacture
5. Manufacturing parameters (temperature, velocity, pressure, etc.[1])
6. Trade name of the raw material
7. Manufacturer of the raw material
8. Batch number and date of manufacture for the raw material. For PVC mixtures the recipe ID must be stated as well.
9. Sampling procedures (from storage of production)
10. Person responsible for the sampling

Samples for audit testing must be selected every third year, for each material.

The samples must not be packed in plastic packaging.

[1] Manufacturing parameters are parameters that affect migration of substances from the manufactured products, such as raw materials, melt temperature, extrusion velocity, etc.

3. Scope of analysis for audit testing (surveillance testing)

The analyses are carried out according to the test outline completed by the toxicological consultant for the type test. The test outline must be updated prior to the audit test due to potential changes based on newly acquired information, see point 5 of the list below. The toxicological consultant must assess which of the substances below that must be included in the analyses.

Scope of analysis for test samples:

1. TOC
2. Organoleptic assessment (TON and TFN)
3. Phenol
4. Degradation substances:
   - 4.1 5-methyl-2-hexanone (110-12-3)
   - 4.2 4-ethylphenol (123-07-9)
   - 4.3 4-tertbutylphenol (98-54-4)
   - 4.4 4 butoxyphenol (122-94-1)
   - 4.5 2,6-di-tert-butyl-1,4-benxoquinon (719-22-2)
   - 4.6 2,4-di-tert-butylphenol (96-76-4)
   - 4.7 2,6-bis (1,1-dimethyl)-4-methylphenol (128-37-0)
   - 4.8 3,5-di-tert-butyl-4-hydroxystyrene (52858-87-4)
   - 4.9 3,5-di-tert-butyl-4-hydroxybenzaldehyde (1620-98-0)
   - 4.10 3,5-di-tert-butyl-4-hydroxyacetophenone (14035-33-7)
   - 4.11 7,9-di-tert-butyl-1-oxaspiro (4,5) decra-6,9-diene-2,8-dione (82304-66-3)
   - 4.12 3-methyl-3,5-di-tert-butyl-4-hydroxyphenolpropanoate (6386-38-5)
5. If the toxicological consultant assesses – based on the recipe or newly acquired information - that other substances are relevant, these must be included in the test outline.