draft design BRL-K15003 Date declared binding by Kiwa

Evaluation Guideline

for the Kiwa product certificate for products used for treatment and / or production of drinking water

Preface

This evaluation guideline has been accepted by the Kiwa Board of Experts CWK, in which all relevant parties in the field of products for treatment and / or production of drinking water are represented. The Board of Experts also supervises the certification activities and where necessary requires the evaluation guideline to be revised. All references to Board of Experts in this evaluation guideline pertain to the above mentioned Board of Experts.

The Committee of Experts (CoE) for products in contact with drinking water of the Ministry of Infrastructure and Environment agrees with the content of this guideline as a sound and solid basis for the certification of products used for treatment and / or production of drinking water.

This evaluation guideline will be used by Kiwa in conjunction with the Kiwa-Regulations for Product Certification. This regulation details the method used by Kiwa for conducting the necessary investigations prior to issuing the product certificate and the method of external control.

Based on this evaluation guideline a certificate is issued on the quality of drinking water chemicals and non chemical products as they are produced, including the quality control of the production process on the production location.

For chemicals:

This certificate does not cover the transport and delivery of drinking water chemicals.

Requirements for transport and delivery are listed in BRL-K15001. A certificate on the bases of BRL-K15001 is indicated by Kiwa-ATD (Kiwa-Approval Transport Drinking water chemicals)

This evaluation guideline is to be assessed by the Board of Experts at least every 5 years, but at the latest on (datum 5 jaar na bindend verklaring).

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The use of this evaluation guideline by third parties, for any purpose whatsoever, is only allowed after a written agreement is made with Kiwa to this end.

Validation

This evaluation guideline has been validated by the Director Certification and Inspection of Kiwa on Date

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1 Introduction

1.1 General

This evaluation guideline includes all relevant requirements which are adhered to by Kiwa as the basis for the issue and maintenance of a certificate for products used for treatment and /or production of drinking water.

For the performance of its certification work, Kiwa is bound to the requirements as included in the clause 4.6 "conditions and procedures fro granting, maintaining, extending, suspending and withdrawing certification" of NEN-EN 45011.

Whenever a Kiwa evaluation guideline is issued for a specific product that Kiwa evaluation guideline supersedes this Kiwa evaluation guideline.

Remark: BRL-K15001: "Evaluation Guideline for the quality of the supply chain for chemicals used for drinking water supplies (Beoordelingsrichtlijn kwaliteit leveringsketen chemicaliën drinkwatervoorziening)" is in force for transport of water treatment/and or water production chemicals.

1.2 Field of application / scope

The products are intended to be used for treatment and / or production of water intended for human consumption. It describes the characteristics of the product and specifies the requirements of the product and gives reference to the analytical methods (e.g. when the product is a chemical substance). All potential adverse effects on the quality of drinking water or tap water caused by the product are covered by this guideline.

1.3 Acceptance of test reports provided by the supplier

Reports produced by laboratories or inspection bodies, used by the manufacturer to demonstrate the product meets the requirements of this evaluation guideline, shall meet one of the applicable accreditation norms below:

- NEN-EN-ISO/IEC 17025 for laboratories:
- NEN-EN-ISO/IEC 17020 for inspection bodies;

This requirement is considered to be fulfilled when a certificate of accreditation can be shown, issued by the Board of Accreditation (RvA) or by one of the institutions an agreement of mutual acceptance has been concluded by the RvA.

The accreditation shall refer to the examination as required in this BRL. When no certificate of accreditation can be shown, Kiwa shall verify whether the accreditation norm is fulfilled.

1.4 Quality declaration

The quality declarations to be issued by Kiwa are described as Kiwa product certificate.

A model of the certificate to be issued on the basis of this evaluation guideline has been included as Annex I.

2 Terms and definitions

In this evaluation guideline the following terms and definitions are applicable:

Evaluation Guideline (BRL): the agreements made within the Board of Experts on the subject of certification.

Board of Experts: the Board of Experts "CWK".

Supplier: the party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based.

IQC scheme (IQCS): a description of the quality inspections carried out by the supplier as part of his quality system.

Product: chemicals or non chemical products

Chemicals: for this guideline with "chemical" is meant all water treatment products covered by the "Ministerial Regulation materials and chemicals drinking water- and warm tap water supply" (published in the Government Gazette).

Non chemical products: (prefab) products, like membranes and ion exchangers, also covered by the "Ministerial Regulation materials and chemicals drinking waterand warm tap water supply" (published in the Government Gazette).

Product requirements: requirements made specific by means of measures or figures, focussing on (identifiable) characteristics of products and containing a limiting value to be achieved, which limiting value can be calculated or measured in an unequivocal manner.

Pre-certification tests: tests in order to ascertain that all the requirements recorded in the evaluation guideline are met.

Inspection tests: tests carried out after the certificate has been granted in order to ascertain whether the certified products continue to meet the requirements recorded in the evaluation guideline.

Remark: The test matrix contains a summary showing what tests Kiwa will carry out in the pre-certification stage and in the event of inspections as well as showing the frequency with which the inspection tests will be carried out.

Product certificate: a document in which Kiwa declares that a product may, on delivery, be deemed to comply with the product specification recorded in the product certificate.

Tap water (origin NEN 1006:2002): water intended for drinking, cooking, food preparation or other domestic purposes.

Testing: all necessary testing, done by the manufacturer to ensure that the product shall meet the requirements of this guideline

Remark: Testing can be:

4

BRT (Batch Release Testing)

PVT (Product Verification Testing), etc

Ctgb: "College voor de toelating van gewasbeschermingsmiddelen en biociden" ("Board for the authorization of plant protection products and biocides)"

Remark: Only after authorization by Ctgb for the relevant aspects in relation with requirements for biocides, an approval according to BRL-K15003 can be started.

See also table 1.

3 Procedure for granting the quality declaration

3.1 Pre-certification tests

The pre-certification tests to be performed are based on the (product) requirements as included in this evaluation guideline including the test methods and contain, depending on the nature of the product to be certified:

- type testing to determine whether the products comply with the product and/or functional requirements,
- Production Process Assessment
- · Assessment of the quality system and the IQC-scheme
- Assessment on the presence and functioning of the remaining procedure

3.2 Granting the quality declaration

After finishing the pre-certification tests the results are presented to the person deciding on granting of the certificate. This person evaluates the results and decides whether the certificate can be granted or additional data and/or tests are necessary.

4 Requirements

4.1 General

This chapter contains the requirements that products used for treatment and / or production of drinking water have to fulfil. These requirements will make part of the technical specification of the products, as included in the certificate.

4.2 Requirements to avoid deterioration of the quality of drinking water

In addition to what has been mentioned in chapter 3 also the following applies. Products and materials, which (may) come into contact with water, drinking water or warm tap water, are not allowed to release substances in such quantities that can jeopardise the health of the consumer or the quality of the drinking water. For that the products or materials have to meet the toxicological, microbiological and organoleptic requirements which are laid down in the "Regulation materials and chemicals drinking water and warm tap water supply" (published in the Government Gazette). This means that de procedure for obtaining a recognised quality declaration, as meant in the valid Regulation, has to be concluded with positive results.

Products and materials with a quality declaration (*), issued by e.g. a foreign certification institute, are allowed to be used in the Netherlands, provided that the Minister has declared this quality declaration equivalent to the quality declaration as meant in the Regulation.

For test methods, see paragraph 5.2

4.3 Lifetime of the product

The lifetime of the product is according to the manufacturers own declaration.

For non-chemical products;

• the operating lifetime during normal usage: the length of time during which the product can be operated or used before breakdown.

For chemicals;

• the shelf life: the amount of time that a properly packaged and stored chemical will last without undergoing chemical or physical changes.

All relevant aspects shall be inspected during the audits. All direct and indirect testing is stated in the IQC scheme, see chapter 3, using the relevant standards as listed in chapter 5.

4.4 Chemicals

The manufacturer shall present all testing data according to the relevant EN standard to be evaluated by Kiwa during the audits visits. Test results shall be in accordance with the (by Kiwa) agreed values.

Testing methods of chemical products are listed in paragraph 5.3.

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□ 8 - Comments before 1 August 2014

^{*} A quality declaration issued by an independent certification institute in another member state of the European Community than the Netherlands or another state party to the agreement to the European Economic Area, is equivalent to a recognised quality declaration, to the extent that, to the judgment of the Minister of the first mentioned quality declaration, is fulfilled to at least the equivalent requirements as meant in the Regulation materials and chemicals drinking water- and warm tap water supply.

4.5 Non chemical products

The relevant aspects of non chemical products shall be checked during the audits in relation to the manufacturers own declaration, and put down in the IQC scheme.

4.6 Installation instructions

The supplier shall provide installation instructions where applicable. A reference to these instructions shall be made at or near the packaging. The instructions must contain specific information with regard to storage, safety, transport, processing temperature, and specific installation guidelines.

4.7 Protection of products during transport and storage

When applicable, the products shall be protected during storage and transport to prevent contamination of all product-parts intended to be in contact with the drinking water.

See for information Annex III: "Guidance for prevention of contamination during transport and storage".

5 Test methods

5.1 General

This chapter contains the test methods that products used for treatment and / or production of drinking water have to fulfil.

5.2 Test methods to avoid deterioration of the quality of the drinking water In addition to what has been mentioned in chapter 3.1 also the following test methods apply:

Table 1 - preparation method and test method

Product	Preparation	Test method	
Chemicals			
Chemicals - general		1)	
Disinfection agents		only after approval of Ctgb	
Non chemical products			
Filter materials	2) NEN-EN 12902	1)	
Membrane products	3) NEN-EN 12873-4		
lon exchange products	3) NEN-EN 12873-3		
Non-metal and non- cementitious products	3) NEN-EN 12873-1		

- 1) the specific method to identify parameters as described with the "Regulation materials and chemicals drinking water- and warm tap water supply" shall be followed.
- 2) migration test
- 3) extraction test for sand, gravel, activated carbon, anthracite, bentonite.

Remark: For specific products not all requirements are relevant (for instance organoleptic aspects for products used in the first steps of the water treatment process).

5.3 Chemicals

The manufacturer shall present all testing data according to the relevant EN standard to Kiwa during the audits visits. In agreement with the certification body a test method can be used other than in table 2.

Table 2 – relevant normative documents for this evaluation guideline . (the latest version is valid).

Standard	Title
EN 878	Chemicals used for treatment of water intended for human consumption — Aluminium sulfate
EN 881	Chemicals used for treatment of water intended for human consumption — Aluminium chloride, aluminium chloride hydroxide and aluminium chloride hydroxide sulfate (monomeric)
EN 882	Chemicals used for treatment of water intended for human consumption – Sodium aluminate
EN 883	Chemicals used for treatment of water intended for human consumption — Polyaluminium chloride hydroxide and polyaluminium chloride hydroxide sulfate
EN 885	Chemicals used for treatment of water intended for human consumption — Polyaluminium chloride hydroxide silicate

EN 886	Chemicals used for treatment of water intended for human consumption — Polyaluminium hydroxide silicate sulfate
EN 887	Chemicals used for treatment of water intended for human consumption — Aluminium iron (III) sulfate
EN 888	Chemicals used for treatment of water intended for human consumption – Iron (III) chloride
EN 889	Chemicals used for treatment of water intended for human
EN 890	consumption – Iron (II) sulfate Chemicals used for treatment of water intended for human
EN 891	consumption – Iron (III) sulfate Chemicals used for treatment of water intended for human
EN 896	consumption – Iron (III) chloride sulfate Chemicals used for treatment of water intended for human
EN 897	consumption – Sodium hydroxide Chemicals used for treatment of water intended for human
	consumption - Sodium carbonate
EN 898	Chemicals used for treatment of water intended for human consumption – Sodium hydrogen carbonate
EN 899	Chemicals used for treatment of water intended for human consumption — Sulfuric acid
EN 900	Chemicals used for treatment of water intended for human consumption - Calcium hypochlorite
EN 901	Chemicals used for treatment of water intended for human consumption – Sodium hypochlorite
EN 902	Chemicals used for treatment of water intended for human consumption – Hydrogen peroxide
EN 935	Chemicals used for treatment of water intended for human consumption — Aluminium iron (III) chloride and aluminium iron
EN 936	(III) hydroxide (monomeric) Chemicals used for treatment of water intended for human
EN 937	consumption – Carbon dioxide Chemicals used for treatment of water intended for human
EN 938	consumption – Chlorine Chemicals used for treatment of water intended for human
EN 939	consumption – Sodium chlorite Chemicals used for treatment of water intended for human
EN 973	consumption – Hydrochloric acid Chemicals used for treatment of water intended for human
	consumption – Sodium chloride for regeneration of ion exchangers
EN 974	Chemicals used for treatment of water intended for human consumption — Phosphoric acid
EN 1017	Chemicals used for treatment of water intended for human
EN 1018	consumption – Half-burnt dolomite Chemicals used for treatment of water intended for human
EN 1019	consumption – Calcium carbonate Chemicals used for treatment of water intended for human
EN 1197	consumption – Sulfur dioxide Chemicals used for treatment of water intended for human
EN 1198	consumption – Monozinc phosphate solution Chemicals used for treatment of water intended for human
	consumption - Sodium dihydrogen orthophosphate
EN 1199	Chemicals used for treatment of water intended for human consumption — Disodium hydrogen orthophosphate
EN 1200	Chemicals used for treatment of water intended for human consumption – Trisodium orthophosphate
EN 1201	Chemicals used for treatment of water intended for human

	consumption – Monopotassium dihydrogen orthophosphate
EN 1202	Chemicals used for treatment of water intended for human
EN 1202	consumption — Dipotassium hydrogen orthophosphate
EN 1203	Chemicals used for treatment of water intended for human
EN 1203	
EN 1204	consumption – Tripotassium orthophosphate Chemicals used for treatment of water intended for human
EN 1204	
EN 400E	consumption – Monocalcium phosphate
EN 1205	Chemicals used for treatment of water intended for human
EN 4000	consumption – Sodium acid pyrophosphate
EN 1206	Chemicals used for treatment of water intended for human
EN 4007	consumption – Tetrasodium pyrophosphate
EN 1207	Chemicals used for treatment of water intended for human
EN 4000	consumption – Tetrapotassium hydrophosphate
EN 1208	Chemicals used for treatment of water intended for human
<u> </u>	consumption – Sodium calcium polyphosphate
EN 1209	Chemicals used for treatment of water intended for human
	consumption – Sodium silicate
EN 1210	Chemicals used for treatment of water intended for human
	consumption – Sodium tripolyphosphate
EN 1211	Chemicals used for treatment of water intended for human
	consumption – Potassium tripolyphosphate
EN 1212	Chemicals used for treatment of water intended for human
	consumption – Sodium polyphosphate
EN 1278	Chemicals used for treatment of water intended for human
	consumption – Ozone UAP
EN 1278	Chemicals used for treatment of water intended for human
	consumption - Ozone
EN 1302 + EN1302/AC	Chemicals used for treatment of water intended for human
	consumption – Aluminium-based coagulants – Analytical
	methods – Purity classification
EN 1405	Chemicals used for treatment of water intended for human
	consumption – Sodium alginate
EN 1406	Chemicals used for treatment of water intended for human
	consumption – Modified starches
EN 1407	Chemicals used for treatment of water intended for human
	consumption – Anionic and non-ionic polyacrylamides
EN 1408rev	Chemicals used for treatment of water intended for human
	consumption – Poly(diallyldimethylammonium chloride)
EN 1409rev	Chemicals used for treatment of water intended for human
	consumption – Polyamines
EN 1410rev	Chemicals used for treatment of water intended for human
	consumption – Cationic polyacrylamides
EN 1421	Chemicals used for treatment of water intended for human
	consumption – Ammonium chloride
EN 12120	Chemicals used for treatment of water intended for human
	consumption - Sodium hydrogen sulfite
EN 12121	Chemicals used for treatment of water intended for human
	consumption – Sodium disulfite
EN 12122	Chemicals used for treatment of water intended for human
	consumption – Ammonium hydroxide
EN 12123	Chemicals used for treatment of water intended for human
····=- - -	consumption – Ammonium sulfate
FN 12124	
EN 12124	Chemicals used for treatment of water intended for human
	Chemicals used for treatment of water intended for human consumption – Sodium sulfite
EN 12124 EN 12125	Chemicals used for treatment of water intended for human consumption – Sodium sulfite Chemicals used for treatment of water intended for human
	Chemicals used for treatment of water intended for human consumption – Sodium sulfite

	consumption - Liquefied ammonia
EN 12173	Chemicals used for treatment of water intended for human
LIV 12170	consumption – Sodium fluoride
EN 12174	Chemicals used for treatment of water intended for human
LIN IZIT	consumption – Disodium hexafluorosilicate
EN 12175	Chemicals used for treatment of water intended for human
LIN 12175	consumption – Hexafluorosilicic acid
EN 12386	Chemicals used for treatment of water intended for human
EN 12300	
EN 12485	consumption – Copper sulfate Chemicals used for treatment of water intended for human
EN 12405	consumption - Calcium carbonate, High-calcium lime and half-
	burnt dolomite - Test methods
EN 12518	Chemicals used for treatment of water intended for human
EN 12316	
EN 12671	consumption – High-calcium lime Chemicals used for treatment of water intended for human
EN 120/1	
EN 40070	consumption – Chlorine dioxide
EN 12672	Chemicals used for treatment of water intended for human
EN 40070	consumption – Potassium permanganate
EN 12678	Chemicals used for treatment of water intended for human
EN 400E0	consumption Potassium peroxomonosulfate
EN 12876	Chemicals used for treatment of water intended for human
EN 10001	consumption – Oxygen
EN 12901	Chemicals used for treatment of water intended for human
	consumption — Inorganic supporting and filtering materials -
	Definitions
EN 12902	Chemicals used for treatment of water intended for human
	consumption – Supporting and filtering materials – Methods of
	test
EN 12903	Chemicals used for treatment of water intended for human
	consumption – Powdered activated carbon
EN 12904	Chemicals used for treatment of water intended for human
	consumption – Sand and gravel
EN 12905	Chemicals used for treatment of water intended for human
consumption – Expanded aluminosilicate	
EN 12906	Chemicals used for treatment of water intended for human
	consumption - Pumice
EN 12907	Chemicals used for treatment of water intended for human
	consumption - Pyrolised coal material
EN 12909	Chemicals used for treatment of water intended for human
	consumption – Anthracite
EN 12910	Chemicals used for treatment of water intended for human
	consumption - Garnet
EN 12911	Chemicals used for treatment of water intended for human
	consumption - Manganese greensand UAP
EN 12912	Chemicals used for treatment of water intended for human
	consumption – Barite
EN 12913	Chemicals used for treatment of water intended for human
	consumption - Powdered diatomaceous earth
EN 12914	Chemicals used for treatment of water intended for human
	consumption – Powdered perlite
EN 12915-1	Chemicals used for treatment of water intended for human
	consumption – Granular activated carbon- Part 1 : Virgin
	granular activated carbon
EN 12915-2	Chemicals used for treatment of water intended for human
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	consumption – Granular activated carbon- Part 2: Reactivated
	granular activated carbon
EN 12926	Chemicals used for treatment of water intended for human
-14 12020	One mode does for treatment of water interided for number

	concumption Codium percyadicultate
EN 12931	consumption – Sodium peroxodisulfate Chemicals used for treatment of water intended for human
EN 12931	
EN 40000	consumption – Sodium dichloro isocyanurate
EN 12932	Chemicals used for treatment of water intended for human
EN 12933	consumption – Sodium dichloro ioisocyanurate, dihydrate Chemicals used for treatment of water intended for human
EN 12933	
EN 40470	consumption – Trichloro isocyanuric acid
EN 13176	Chemicals used for treatment of water intended for human
EN 40477	consumption – Ethanol
EN 13177	Chemicals used for treatment of water intended for human
EN 42404	consumption – Methanol UAP
EN 13194	Chemicals used for treatment of water intended for human
EN 40750	consumption – Acetic acid
EN 13752	Chemicals used for treatment of water intended for human
EN 40750	consumption – Manganese dioxide
EN 13753	Chemicals used for treatment of water intended for human
EN 10751	consumption – Granular activated alumina
EN 13754	Chemicals used for treatment of water intended for human
TD 44000	consumption – Bentonite
TR 14269	Guidelines for the purchase of chemicals used for treatment of
	water intended for human consumption (CEN Report)
EN 14368	Products used for treatment of water intended for human
	consumption – Manganese dioxide coated limestone
EN 14369	Products used for treatment of water intended for human
	consumption – Iron coated granular activated alumina
EN 14456	Chemicals used for treatment of water intended for human
	consumption – Bone charcoal
EN 14664	Chemicals used for treatment of water intended for human
	consumption – Iron (III) sulfate, solid
TR 14740 1278/prA1	Chemicals used for treatment of water intended for human
	consumption – Ozone production : Guidelines for installation
	and minimal functional requirements (CEN report)
prEN 14805	Chemicals used for treatment of water intended for human
	consumption –Sodium chloride for electrochemical generation
	of chloride
EN 15028	Chemicals used for treatment of water intended for human
	consumption – Sodium chlorate
EN 15029	Chemicals used for treatment of water intended for human
	consumption –Iron (III) hydroxide oxide
EN 15030	Chemicals used for treatment of water intended for human
	consumption –Silver salts for the conservation of drinking
	water for intermittent use
EN 15031	Chemicals used for treatment of swimming pool water —
	Aluminium based coagulants
EN 15032+A1	Chemicals used for treatment of swimming pool water –
	Trichloroisocyanuric acid
EN 15039	Chemicals used for treatment of water intended for human
	consumption –Antiscalants for membranes-Polycarboxylic
	acids and salts
EN 15040	Chemicals used for treatment of water intended for human
	consumption –Antiscalants for membranes-Phosphonic acids
	and salts
EN 15041	Chemicals used for treatment of water intended for human
	consumption –Antiscalants for membranes-Polyphosphates
EN 15072+A1	Chemicals used for treatment of swimming pool water —
	Sodium dichloroisocyanurate, anhydrous
EN 15073+A1	Chemicals used for treatment of swimming pool water —

	Sodium dichloroisocyanurate, dihydrate
EN 15074	Chemicals used for treatment of swimming pool water — Ozone
EN 15075	Chemicals used for treatment of swimming pool water — Sodium hydrogen carbonate
EN 15076	Chemicals used for treatment of swimming pool water — Sodium hydroxide
EN 15077	Chemicals used for treatment of swimming pool water — Sodium hypochlorite
EN 15078	Chemicals used for treatment of swimming pool water — Sulfuric acid
EN 15362	Chemicals used for treatment of swimming pool water – Sodium carbonate
EN 15363	Chemicals used for treatment of swimming pool water – Chlorine
EN 15482	Chemicals used for treatment of water intended for human consumption — Sodium permanganate
EN 15513	Chemicals used for the treatment of swimming pool – carbon dioxide
EN 15514	Chemicals used for the treatment of swimming pool – hydrochloric acid
EN 15795	Products used for treatment of water intended for human consumption - Natural unexpanded aluminosilicates
EN 15796	Chemicals used for treatment of swimming pool water - Calcium hypochlorite
EN 15797	Chemicals used for the treatment of swimming pool water - Iron based coagulants
EN 15798	Products used for the treatment of swimming pool water - Filter media
EN 15799	Products used for treatment of swimming pool water - Powdered activated carbon
EN 16003	Chemicals used for treatment of water intended for human consumption - Calcium magnesium carbonate
EN 16004	Chemicals used for treatment of water intended for human consumption - Magnesium oxide
EN 16037	Chemicals used for water intended for human consumption - Sodium hydrogen sulfate
EN 16038	Chemicals used for treatment of swimming pool water - Sodium hydrogen sulfate

5.4 Non chemical products

The testing of non-chemical products: e.g. membranes, ion exchange products, filter materials etc. shall be agreed upon between the supplier and Kiwa. The documentation and registration requirements of the test methods and test results shall comply to ISO 9001:2008 paragraph 4.2.

6 Marking

6.1 General

The products have to be marked with following indelible marks and indications:

- name or logo of the manufacturer;
- data or code indicating the date of production;
- type indication

6.2 Certification mark

After concluding a Kiwa certification agreement the certified products shall, beside the marks indicated in the respective standards, be indelible marked with the:

Kiwa watermark: - $\mbox{\ensuremath{\mbox{\ensuremath{\&}}}}$ or the simplified version of the watermark : $\mbox{\ensuremath{\mbox{\ensuremath{\&}}}}$

7 Requirements in respect of the quality system

This chapter contains the requirements which have to be met by the supplier's quality system.

7.1 Manager of the quality system

Within the supplier's organizational structure an employee must have been appointed who is in charge of managing the supplier's quality system.

7.2 Internal quality control/quality plan

The supplier shall have an internal quality control scheme (IQC scheme) which is applied by him.

The following must have been demonstrably recorded in this IQC scheme:

- what aspects are checked by the producer;
- according to what methods such inspections are carried out;
- how often these inspections are carried out;
- in what way the inspection results are recorded and kept.

This IQC scheme should at least be an equivalent derivative of the model IQC scheme as shown in annex II.

7.3 Procedures and working instructions

The supplier shall be able to submit the following:

- procedures for:
 - o dealing with products showing deviations;
 - o corrective actions to be taken if non-conformities are found;
 - o dealing with complaints about products and/or services delivered;
- the working instructions and inspection forms used.

8 Summary of tests and inspections

This chapter contains a summary of the following tests and inspections to be carried out in the event of certification:

- Pre-certification tests;
- Inspection test as to toxicological requirements and product requirements:
- Inspection of the quality system.

The frequency with which Kiwa will carry out inspection tests is also stated in the summary.

8.1 Test matrix

In table 3 the test matrix is given.

Table 3 - Test matrix.

Description of requirement			
bescription of requirement	BRL	Pre- certification	Supervision by Kiwa after granting of certificate ^{1, 2)}
Requirements to avoid deterioration of the quality of the drinking water	4.2	Х	Х
Lifetime of the product	4.3	Х	Х
Chemicals	4.4	Х	Х
Non chemical products	4.5	Х	Х
Installation instructions	4.6	Х	X
Protection during transport and storage	4.7	Х	Х
Marking	5	Х	Х

- In case the product or production process changes significantly, it must be determined whether the performance requirements are still met.
- 2) All product characteristics that can be determined within the visiting time (maximum 1 day) are determined by the inspector or by the supplier in the presence of the inspector. In case this is not possible, an agreement will be made between the certification body and the supplier about how the inspection will take place.

8.2 Inspection of the quality system

The quality system will be checked by Kiwa on the basis of the IQC scheme. The inspection contains at least those aspects mentioned in the Kiwa Regulations for Product certification.

9 Agreements on the implementation of certification

9.1 General

Beside the requirements included in these evaluation guideline, also the general rules for certification as included in the Kiwa Regulations for Product Certification apply.

These rules are in particular

- the general rules for conducting the pre-certification tests, to be distinguished in:
 - the way suppliers are to be informed about how an application is being handled,
 - o how the test are conducted,
 - the decision to be taken as a result of the pre certification tests.
- the general directions for conducting inspections and the aspects to be audited,
- the measurements to be taken by Kiwa in case of Non Conformities,
- measurements taken by Kiwa in case of improper use of Certificates, Certification Marks, Pictograms and Logos,
- terms for termination of the certificate,
- the possibility to lodge an appeal against decisions of measurements taken by Kiwa.

9.2 Certification staff

The staff involved in the certification may be sub-divided into:

- certification experts: they are in charge of carrying out the pre-certification tests and assessing the inspectors' reports;
- inspectors: they are in charge of carrying out external inspections at the supplier's works:
- decision-makers: they are in charge of taking decisions in connection with the
 pre-certification tests carried out, continuing the certification in connection with
 the inspections carried out and taking decisions on the need to take corrective
 actions.

9.2.1 Qualification requirements

The following qualification requirements have been set by the Board of Experts for the subject matter of this evaluation guideline (see table 4):

Table 4 – Qualification requirements of certification staff.

EN 45011	Certification Expert	Inspector	Decision maker
Education - general	 Technical higher-level professional education Internal training certification and Kiwa policy Training auditing 	 Intermediate-level professional education Internal training certification and Kiwa policy Training auditing 	 Higher level professional education Internal training certification and Kiwa policy Training auditing
Education - specific	 for BRL relevant technical education specific studies and training (know-how and skills) 	 for BRL relevant technical education specific studies and training (know-how and skills) 	not applicable.
Experience - general	1 year of relevant work experience with at least 4 pre certification tests of which one carried out independent under supervision.	1 year of relevant work experience with at least 4 inspections of which one carried out independent under supervision	4 year of relevant work experience with at least 1 year in certification
Experience - specific	Detailed knowledge of the BRL and 4 certification tests carried out on the basis of the BRL or similar	Detailed knowledge of the BRL and 4 inspections carried out on the basis of the BRL or one similar.	general knowledge of the BRL

The level of education and the experience of the certification staff involved should be demonstrably recorded.

9.2.2 Qualification

The qualification of the Certification staff shall be demonstrated by means of assessing the education and experience to the requirements mentioned before. In case staff is to be qualified on the basis of deflecting criteria, written records shall be kept.

The authority to qualify staff is dedicated to:

- · decision makers: qualification of certification experts and inspectors,
- management of Kiwa: qualification of decision makers.

9.3 Report Pre-certification tests

Kiwa records the results of the pre-certification tests in a report. This report shall comply with the following requirements:

- completeness: the reports verdicts about all requirements included in the evaluation guideline,
- traceability: the findings on which the verdicts have been based shall be recorded traceably,
- basis for decision: the decision maker shall be able to base his decision on the findings included in the report.

9.4 Decision for granting the certificate

The decision for granting the certificate shall be made by a qualified decision maker which has not been involved in the pre-certification tests. The decision shall be recorded traceably.

9.5 Lay out of quality declaration

The product certificate shall be conform the model included as an Annex I.

9.6 Nature and frequency of external inspections

The certification body shall carry out audits at the supplier at regular intervals to check whether the supplier complies with his obligations. About the frequency of inspections the Board of Experts decides.

At the time this evaluation guideline took effect, the frequency was set at one inspection visit per year for suppliers that have a quality management system according to NEN-EN-ISO 9001 that applies to the products mentioned in this evaluation guideline. The quality management system shall be accredited by an certification body complying with NEN-EN-ISO 17021. Further the ISQ scheme shall be an integrated part of the quality management system.

In the case the supplier is not certified, the frequency can be increased to two inspection visits per year.

Inspections shall at least refer to:

- the suppliers IQC-scheme and the results obtained from inspections carried out by the supplier,
- the correct way of marking of certified products
- complying to required procedures.

The results of each inspection shall be traceably recorded in a report.

9.7 Interpretation of requirements

The Board of Experts may record the interpretation of requirements of these evaluation guidelines in one separate interpretation document.

10 Titles of standards

10.1 Public law rules

In table 5 the public rules that have to be fulfilled are listed.

Table 5 - Public law rules.

Standard	Title		
Staatscourant van 18 juli 2011,	Regeling Materialen en Chemicaliën drink- en		
nr. 11911	warm tapwatervoorziening		

10.2 Standards / normative documents

In table 6 the relevant normative documents (standards) for this evaluation guideline are listed.

Table 6 – For this evaluation guideline relevant normative documents (standards). (the latest version is valid).

Standard	Title			
ISO 9001:2008	Quality management systems - Requirements (Corrected and reprinted)			
NEN-EN-ISO 17021	- Conformity assessment - Requirements for bodies providing audit and certification of management systems			
NEN-EN ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection			
NEN-EN ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories			
NEN-EN 12902	Products used for treatment of water intended for human consumption - Inorganic supporting and filtering materials - Methods of test			
NEN-EN 12873-1	Influence of materials on water intended for human consumption - Influence due to migration - Part 1: Test method for non-metallic and non-cementitious factory made products			
NEN-EN 12873-2	Influence of materials on water intended for human consumption - Influence due to migration - Part 2: Test method for non-metallic and non-cementitious site-applied materials			
NEN-EN 12873-3	Influence of materials on water intended for human consumption - Influence due to migration - Part 3: Test method for ion exchange and absorbent resins			
Table 1	See description in table 1			



Model Certificate

Number

K12345

Replaces

Issued

Dated

product certificate

for approval of products used for treatment and or production of drinking water

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this certificate and marked with the Kiwa-mark as indicated under 'marking', manufactured by

Supplier

may, on delivery, be relied upon to comply with the Kiwa evaluation guideline BRL-K15003 "products used for treatment and or production of drinking water.

Kiwa Nederland B.V.

ing. B. Meekma Kiwa

This certificate is issued in accordance with the Kiwa-regulations for Product Certification and consists of ... pages.

Publication of the certificate is allowed.

Company



Kiwa Nederland B.V.

Sir W. Churchill-laan 273 P.O. Box 70 2280 AB Rijswijk

Telephone ++31 70 41 44 400
Telefax ++31 70 41 44 420

Internet www.kiwa.nl

The Netherlands



Name product

PRODUCT SPECIFICATION

Product specification

The products mentioned below belong to this certificate Product name

Toxicological requirements

Approval:

This product is approved on the basis of the requirements set in the " Regulation materials and chemicals drinking water - and warm tap water supply"; published in the Staatscourant). ATA criteria:

The ATA product certification is based on two main criteria. It should permanently comply with:

- The product recipe approved during the assessment procedure. The recipe is laid down in the for confidentiality reasons undisclosed appendix to the certification agreement Kxxx. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa-ATA-approval procedure;
- Specific ATA-product requirements, laid down in the appendix to the certification agreement Kxxx. For confidentiality reasons this appendix is not public.

De products shall be marked with the Kiwa®-mark (KIWA) and the Kiwa®-Watermark



The minimum required marking on the products (outer casing) shall be:

- BRL-K15003
- Manufacturer's or suppliers name and trade mark or identification mark;
- Production code

The realization of the marks is as follows: clearly and indelible at Location

Application and use

RECOMMENDATIONS FOR CUSTOMERS

Check at the time of delivery whether:

- the producer has delivered in accordance with the agreement;
- the mark and the marking method are correct;
- the products show no visible defects as a result of transport etc.

If you should reject a product on the basis of the above, please contact:

Company

and, if necessary,

• Kiwa Nederland B.V.

Consult the producer's processing guidelines for the proper storage and transport methods.

II Model IQC Scheme

Inspection subjects	Inspection aspects	Inspection method	Inspection frequency	Inspection registration
Raw materials or materials supplied: - recipe sheets - incoming goods inspection raw materials	- Recipe according annex product agreement		Each delivery	Entry control document
Production process, production equipment, plant: - procedures - working instructions - equipment - release of product	- tuning parameters - maintenance aspects	- adjustments machine - maintenance scheme - measuring - visual evaluation	- continuously - continuously - start up new product	- "digital" - work sheet - inspection document
Finished-products	- soundness -etc	- visually - measuring - etc	- continuously - etc	End control documents
Measuring and testing equipment - measuring equipment - calibration	- proper functioning	- during usage - records of non-conformities	- continuously	- end control document - calibration document
Logistics	the range of measurement			
internal transportstoragePreservationpackaging	- circumstances in practise - comparison	- comparison with procedure - visual	- continuously	- keep logistical procedures up to date
- jackaging - identification	with order	inspection		

III Guidance for prevention of contamination during transport and storage

a) Importance of a hygienic operation

A hygienic operation is important issue for the transport and distribution of drinking water in the Netherlands.

The impact of pollution can have big consequences for the water distribution (normally chlorine is not used) and need substantial efforts to clean the system.

The aspect hygiene is mentioned in the Dutch "'Hygiënecode Drinkwater; Opslag, transport en distributie', 2010, which includes manuals for installers.

As result of the Hygienic code a wide range of courses for parties involved (installers, personnel of water companies, etc.) can be followed.

b) Protection of the products

In the 'Hygiënecode Drinkwater; Opslag, transport en distributie" are hygienically procedures described. Procedures for all parts as pipes, fittings and valves in the complete system, from construction until operation are described. The "Hygiëne code" is part of the drinking water law of 1 July 2011.

The primary task here is "prevention" and secondary the preparation of the main for the drinking water transport.

For all products coming from the production location, until installation in the drinking water system the same "preventive" measurements shall be taken ²⁾, to prevent pollution. Therefore manufacturers shall have a procedure how to prevent pollution of certified (drinking water) products during production, transport³⁾ and storage.

c) Requirements for the protection of products

For all preventive (protective) actions taken to protect the products against pollution it is important that the protection will last for the complete process of storage, transport and again storage.

remark:

- 1) mostly this is a microbiological contamination coming from the surrounding area on macroand micro scale (like dust, but also feces and dead beasts).
- 2) "protection" is the combination of packaging and closing the pipe/fitting ends.
- 3)Guideline: BRL151001: "Guideline for the quality of the delivery chain for chemicals intended for the drinking water supply (Beoordelingsrichtlijn kwaliteit leveringsketen chemicaliën drinkwatervoorziening) " is in force for transport of water treatment/and or water production chemicals.