

BRL-K622

2022-01-07

Evaluation Guideline

for the Kiwa product certificate for
Flexible connecting hoses



**Trust
Quality
Progress**

Preface

This evaluation guideline has been accepted by the Kiwa Board of Experts Watercycle (CWK), in which all relevant parties in the field of Cartridges to be used for flexible connecting hoses 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.

This evaluation guideline will be used by Kiwa in conjunction with the Kiwa Regulations for Certification.

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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.

Binding declaration

This evaluation guideline has been declared binding by Kiwa on 2022-01-07

Contents

1	Introduction	4
1.1	General	4
1.2	Field of application / scope	4
1.3	Acceptance of test reports provided by the supplier	4
1.4	Quality declaration	4
2	Terms and definitions	5
2.1	Definitions	5
3	Procedure for granting a product certificate	7
3.1	Pre-certification tests	7
3.2	Granting the product certificate	7
3.3	Investigation into the product and/or performance requirements	7
3.4	Production process assessment	7
3.5	Contract assessment	7
4	Requirements	8
4.1	General	8
4.2	Regulatory requirements	8
4.3	Product requirements	8
4.4	Additional requirements	8
5	Marking	10
5.1	General	10
5.2	Certification mark	10
6	Requirements in respect of the quality system	11
6.1	Manager of the quality system	11
6.2	Internal quality control/quality plan	11
6.3	Control of test and measuring equipment	11
6.4	Procedures and working instructions	11
6.5	Other requirements	11
7	Summary of tests and inspections	12
7.1	Test matrix	12
7.2	Inspection of the quality system of the supplier	12
8	Agreements on the implementation of certification	13

8.1	General	13
8.2	Certification staff	13
8.3	Report initial investigation	14
8.4	Decision for granting the certificate	15
8.5	Layout of quality declaration	15
8.6	Nature and frequency of third party audits	15
8.7	Non conformities	15
8.8	Report to the Board of Experts	16
8.9	Interpretation of requirements	16
9	Titles of standards	17
9.1	Public law rules	17
9.2	Standards / normative documents	17
I	Model certificate (informative)	18
II	Model IQC-scheme (informative)	20

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 flexible connecting hoses.

This evaluation guideline replaces BRL-K622/03, dated 1 February 2012. The quality declarations issued and based on that guideline will remain valid.

For the performance of its certification work, Kiwa is bound to the requirements as included in NEN-EN-ISO/IEC 17065 "Conformity assessment - Requirements for bodies certifying products, processes and services".

1.2 Field of application / scope

The products are intended to be used in drinkingwater installations with a maximum water pressure of 1000 kPa and a maximum water temperature of 70 °C.

1.3 Acceptance of test reports provided by the supplier

If the supplier provides reports from test institutions or laboratories to prove that the products meet the requirements of this evaluation guideline, the supplier shall prove that these reports have been drawn up by an institution that complies with the applicable accreditation standards, namely:

- NEN-EN-ISO/IEC 17020 for inspection bodies;
- NEN-EN-ISO/IEC 17021 for certification bodies certifying systems;
- NEN-EN-ISO/IEC 17024 for certification bodies certifying persons;
- NEN-EN-ISO/IEC 17025 for laboratories;
- NEN-EN-ISO/IEC 17065 for certification bodies certifying products.

Remark:

This requirement is considered to be fulfilled when a certificate of accreditation can be shown, issued either by the Board of Accreditation (RvA) or by one of the institutions with which an agreement of mutual acceptance has been concluded by the RvA. The accreditation shall refer to the examinations as required in this evaluation guideline. When no certificate of accreditation can be shown, Kiwa shall verify whether the accreditation standard is fulfilled.

1.4 Quality declaration

The quality declaration to be issued by Kiwa is described as a Kiwa product certificate.

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

2 Terms and definitions

2.1 Definitions

In this evaluation guideline, the following terms and definitions apply:

- **Board of Experts:** the Board of Experts Watercycle (CWK).
- **Certification mark:** a protected trademark of which the authorization of the use is granted by Kiwa, to the supplier whose products can be considered to comply on delivery with the applicable requirements and possibly with quality information on the application of the product is added by a specially designed label which is based on the result, as stated in the report issued by Kiwa on the inspection of the prototype.
- **Drinking water:** water intended or partly intended for drinking, cooking or food preparation or other domestic purposes, but does not include hot water, and is made available by pipeline to consumers or other customers.
- **Drinking water installation:** an installation direct or in-direct connected to the public drinking water distribution network of a drinking water company (source Dutch drinking water act);
- **Evaluation Guideline (BRL):** the agreements made within the Board of Experts on the subject of certification.
- **Installation:** configuration consisting the pipe work, fittings and appliances;
- **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.
- **IQC scheme (IQCS):** a description of the quality inspections carried out by the supplier as part of his quality system.
- **Pre-certification tests:** tests in order to ascertain that all the requirements recorded in the evaluation guideline are met.
- **Private Label Certificate:** A certificate that only pertains to products that are also included in the certificate of a supplier that has been certified by Kiwa, the only difference being that the products and product information of the private label holder bear a brand name that belongs to the private label holder.
- **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.
- **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 can be calculated or measured in an unequivocal manner.
- **Supplier:** the party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based.

- **Tap water:** water intended for drinking, cooking or food preparation or other domestic purposes.
Note: Tap water includes drinking water, hot tap water and house hold water

3 Procedure for granting a product certificate

3.1 Pre-certification tests

The pre-certification tests to be performed are based on the (product) requirements as contained in this evaluation guideline, including the test methods, and comprises the following:

- 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 procedures.

3.2 Granting the product certificate

After finishing the pre-certification tests, the results are presented to the Decision maker (see 8.2) deciding on granting the certificate. This person evaluates the results and decides whether the certificate can be granted or if additional data and/or tests are necessary.

3.3 Investigation into the product and/or performance requirements

Kiwa will investigate the to be certified products against the certification requirements as stated in the certification requirements.

The necessary samples will be drawn by or on behalf of Kiwa.

3.4 Production process assessment

When assessing the production process, it is investigated whether the producer is capable of continuously producing products that meet the certification requirements. The evaluation of the production process takes place during the ongoing work at the producer.

The assessment also includes at least:

- The quality of raw materials, half-finished products and end products;
- Internal transport and storage.

3.5 Contract assessment

If the supplier is not the producer of the products to be certified, Kiwa will assess the agreement between the supplier and the producer.

This written agreement, which is available for Kiwa, includes at least:

- Accreditation bodies, scheme managers and Kiwa will be given the opportunity to observe the certification activities carried out by Kiwa or on behalf of Kiwa at the producer.

4 Requirements

4.1 General

This chapter contains the requirements the flexible connecting hoses have to fulfil. These requirements will make part of the technical specification of the products, as included in the certificate.

4.2 Regulatory requirements

4.2.1 *Suitability for contact with drinking water*

Products and materials which (may) come into contact with drinking water or warm tap water, shall not release substances in quantities which can be harmful to the health of the consumer, or negatively affect the quality of the drinking water. Therefore, the products or materials shall meet toxicological, microbiological and organoleptic requirements as laid down in the currently applicable "Ministerial Regulation materials and chemicals drinking water and warm tap water supply", (published in the Government Gazette). Consequently, the procedure for obtaining a recognised quality declaration, as specified in the currently effective Regulation, has to be concluded with positive results.

Products and materials with a quality declaration¹, e.g. issued by 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.

Compliance to these requirements is shown for inner hoses when these have been certified according to Kiwa BRL-K14006.

4.3 Product requirements

The conditions of use and requirements for the flexible connecting hoses are laid down in;

EN 13618: "Flexible hose assemblies in drinking water installations - Functional requirements and test methods".

4.4 Additional requirements

In addition to what has been mentioned in 4.2 and 4.3 the following applies.

4.4.1 *Resistance to corrosion*

The applied materials shall be corrosion resistant or protected against corrosion. The materials used may not have an adverse effect on each other.

Applied metallic anticorrosive protection layers shall fulfil the requirements of EN 248.

4.4.2 *Check valves*

When flexible connecting hoses are furnished with a check valve, this shall be one of the family E, type B in accordance with EN 13959 and comply with the requirements of BRL-K629.

¹ A quality declaration issued by an independent certification institute in another member state of the European Community or another state party to the agreement to the European Economic Area, is equivalent to a recognized quality declaration, to the extent that, to the judgment of the Minister of the first mentioned quality declaration, is fulfilled the at least equivalent requirements as meant in the Regulation materials and chemicals drinking water- and warm tap water supply.

4.4.3 Compression fittings

Connecting ends provided with compression fitting shall meet the requirements as included in Kiwa evaluation guideline BRL-K640.

4.4.4 Resistance against UV

The test procedure can deviate from EN13618 and will be determined in cooperation with the manufacturer.

5 Marking

5.1 General



The flexible connecting hose shall be provided with the following markings, in accordance with EN13618:

- manufacturer's name or mark; on the sleeve and if applicable, on the nut of the compression fitting;
- production date or code;
- maximum temperature.

The marking shall be legible and indelible.

5.2 Certification mark

After concluding a Kiwa certification agreement, the following certification mark shall be applied legible, indelible and visibly on the product after assembly:

The Kiwa Water Mark “**Kiwa** ” or the abbreviated wordmark  in a rectangle.

The packaging may be provided with the following mark:



6 Requirements in respect of the quality system

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

6.1 Manager of the quality system

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

6.2 Internal quality control/quality plan

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

The following must be demonstrably recorded in this IQC scheme:

- which aspects are checked by the supplier;
- 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 the Annex.

6.3 Control of test and measuring equipment

The supplier shall verify the availability of necessary test and measuring equipment for demonstrating product conformity with the requirements in this evaluation guideline.

When required the equipment shall be kept calibrated (e.g recalibration at interval).

The status of actual calibration of each equipment shall be demonstrated by traceability through an unique ID.

The supplier must keep records of the calibration results.

The supplier shall review the validity of measuring data when it is established at calibration that the equipment is not suitable anymore.

6.4 Procedures and working instructions

The supplier shall be able to submit the following:

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

6.5 Other requirements

The supplier shall be able to submit the following:

- the organisation's organogram;
- qualification requirements of the personnel concerned.

7 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:** tests in order to ascertain that all the requirements recorded in the evaluation guideline are met;
- **inspection test: 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;
- **inspection of the quality system of the supplier:** monitoring compliance of the IQC scheme and procedures.

7.1 Test matrix

Description of the requirement	Article of BRL-K622	Tests within the scope of:	
		Pre-certification	Inspection after certification (number / year a,b)
Requirements to avoid deterioration of the quality of the drinking water	4.2.1	X	1 / 2
Corrosion resistance	4.4.1	X	1 / 2
Check valves	4.4.2	X	
Compression fittings	4.4.3	X	
UV resistance	4.4.4	X	
Marking - general	6.1	X	1 / 2
Certification mark	6.2		1 / 2
Article of EN 13618			
Dimensions	4.2.2.1	X	1 / 2
Stress corrosion	4.2.2.2	X	1 / 5
Resistance to torque	4.2.2.3	X	1 / 2
Resistance to bending	4.2.2.4	X	1 / 2
Length	4.2.3.1	X	1 / 2
flow rate	4.2.3.2	X	1 / 2
Leak tightness	4.2.3.3	X	1 / 2
Tensile strength	4.2.3.4	X	1 / 2
Pressure cycling resistance	4.2.3.5	X	1 / 5
Resistance to pressure jumps	4.2.3.6	X	1 / 5
Resistance to temperature cycling	4.2.3.7	X	1 / 5
Frost resistance	4.2.3.8	X	1 / 5
Resistance against corrosion	4.2.3.9	X	1 / 2
UV resistance	4.2.3.10	X	1 / 5
Flexibility	4.2.3.11	X	1 / 5

a) In case the product or production process changes, it must be determined whether the performance requirements are still met.

b) The frequency of inspection visits is defined in chapter 8.6 of this evaluation guideline. During the inspection test the inspector checks the products on basis of a selection from the above-mentioned product requirements. The control frequency is defined in 8.6 of this BRL.

7.2 Inspection of the quality system of the supplier

The quality system of the supplier 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 Certification.

8 Agreements on the implementation of certification

8.1 General

Beside the requirements included in these evaluation guidelines, the general rules for certification as included in the Kiwa Regulations for Product Certification also apply. These rules are in particular:

- the general rules for conducting the pre-certification tests, in particular:
 - the way suppliers are to be informed about how an application is being handled;
 - how the test are conducted;
 - the decision to be taken as a result of the pre-certification tests.
- the general rules for conducting inspections and the aspects to be audited,
- the measures to be taken by Kiwa in case of Non-Conformities,
- the measures 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 measures taken by Kiwa.

8.2 Certification staff

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

- Certification assessor (**CAS**): in charge of carrying out the pre-certification tests and assessing the inspectors' reports;
- Site assessor (**SAS**): in charge of carrying out external inspections at the supplier's works;
- Decision maker (**DM**): 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.

8.2.1 Qualification requirements

The qualification requirements consist of:

- qualification requirements for personnel of a certification body which satisfies the requirements EN ISO / IEC 17065, performing certification activities
- qualification requirements for personnel of a certification body performing certification activities set by the Board of Experts for the subject matter of this evaluation guideline

Education and experience of the concerning certification personnel shall be recorded demonstrably.

Basic requirements	Evaluation criteria
Knowledge of company processes Requirements for conducting professional audits on products, processes, services, installations, design and management systems.	<i>Relevant experience: in the field</i> SAS, CAS: 1 year DM: 5 years inclusive 1 year with respect to certification Relevant technical knowledge and experience on the level of: SAS: High school CAS, DM: Bachelor

Basic requirements	Evaluation criteria
Competence for execution of site assessments. Adequate communication skills (e.g. reports, presentation skills and interviewing technique).	SAS: Kiwa Audit training or similar and 4 site assessments including 1 autonomic under review.
Execution of initial examination	CAS: 3 initial audits under review.
Conducting review	CAS: conducting 3 reviews

Technical competences	Evaluation Criteria
Education	General: Education in one of the following technical areas: <ul style="list-style-type: none"> • Civil Engineering; • Engineering.
Testing skills	General: <ul style="list-style-type: none"> • 1 week laboratory training (general and scheme specific) including measuring techniques and performing tests under supervision ; • Conducting tests (per scheme).
Experience - specific	CAS <ul style="list-style-type: none"> • 3 complete applications (excluding the initial assessment of the production site) under the direction of the PM • 1 complete application self-reliant (to be evaluated by PM) • 3 initial assessments of the production site under the direction of the PM • 1 initial assessment of the production site self-reliant (witnessed by PM) SAS <ul style="list-style-type: none"> • 5 inspection visits together with a qualified SAS • 3 inspection visits conducted self-reliant (witnessed by PM)
Skills in performing witnessing	PM Internal training witness testing

Legenda:

- Certification assessor (**CAS**)
- Decision maker (**DM**)
- Product manager (**PM**)
- Site assessor (**SAS**)

8.2.2 Qualification

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

The authority to qualify staff rests with the:

- **PM:** qualification of **CAS** and **SAS**;
- management of the certification body: qualification of **DM**.

8.3 Report initial investigation

The certification body records the results of the initial investigation in a report. This report shall comply with the following requirements:

- completeness: the report provides a verdict about all requirements included in the evaluation guideline;
- traceability: the findings on which the verdicts have been based shall be recorded and traceable;
- basis for decision: the **DM** shall be able to base his decision on the findings included in the report.

8.4 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 in a traceable manner.

8.5 Layout of quality declaration

The product certificate shall be in accordance with the model included in the Annex.

8.6 Nature and frequency of third party audits

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

At the time this BRL entered into force, the frequency of audits amounts two audits on site per year for suppliers with a quality management system in accordance with ISO 9001 for their production, which has been certified by an acknowledged body (in accordance with ISO/IEC 17021) and where the IQC scheme forms an integral part of the quality management system.

In case the supplier is not in possession of a quality management system certificate (issued by Kiwa or any other accredited certification body), the frequency is increased to three visits for the duration of one year.

The audit program on site shall cover at least:

- the product requirements;
- the production process;
- the suppliers IQC scheme and the results obtained from inspections carried out by the supplier;
- the correct way of marking certified products;
- compliance with required procedures;
- handling complaints about products delivered.

For suppliers with a private label certificate the frequency of audits amounts to one audit per two years. These audits are conducted at the site of the private label certificate holder. The audits are conducted at the site of private label holder and focussed on the aspects inserted in the IQC scheme and the results of the control performed by the private label holder. The IQC scheme of the private label holder shall refer to at least:

- the correct way of marking certified products;
- compliance with required procedures for receiving and final inspection;
- the storage of products and goods;
- handling complaints.

The results of each audit shall be recorded by Kiwa in a traceable manner in a report.

8.7 Non conformities

When the certification requirements are not met, measures are taken by Kiwa in accordance with the sanctions policy as written in the Kiwa Regulation for Certification.

The Sanctions Policy is available through the “News and publications” page on the Kiwa website.

8.8 Report to the Board of Experts

De certification body shall report annually about the performed certification activities.

In this report the following aspects are included:

- mutations in number of issued certificates (granted/withdrawn);
- number of executed audits in relation to the required minimum;
- results of the inspections;
- required measures for established Non-Conformities;
- received complaints about certified products.

8.9 Interpretation of requirements

The Board of Experts may record the interpretation of requirements of this evaluation guideline in one separate interpretation document.

9 Titles of standards

9.1 Public law rules

BJZ2011048144
29 juni 2011

Regeling van de Staatssecretaris van
Infrastructuur en Milieu¹

9.2 Standards / normative documents

Number	Title
NEN-EN ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection
NEN-EN ISO/IEC 17021	Conformity assessment - Requirements for bodies providing audit and certification of management systems
NEN-EN ISO/IEC 17024	Conformity assessment - General requirements for bodies operating certification of persons
NEN-EN ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
NEN-EN ISO/IEC 17065	Conformity assessment - Requirements for bodies certifying products, processes and services
BRL-K14006	Inner hoses to be used for flexible connecting hoses
BRL-K629	Check valves against pollution, family E, type A, B, C and D.
BRL-K640	Compression-, press- and push fittings
NEN-EN 13618	Flexible hose assemblies in drinking water installations - Functional requirements and test methods
NEN-EN 13959	Anti- pollution check valves - DN 6 to DN 250 inclusive family E, type A, B, C and D
NEN-EN 248	General specification for electrodeposited coatings of Ni-Cr
NEN 1006	Algemene eisen voor drinkwaterinstallaties
Waterwerkbladen - werkblad Drinkwater installations WB 2.2 A	Waterwerkbladen - werkblad Drinkwater installaties WB 2.2 A

In this BRL is referred to the version in force, unless something else is mentioned

¹ Valid from 1 July 2017

I Model certificate (informative)



CERTIFICATE

Product certificate Kxxxxx/01



Issued XXXX-XX-XX

Replaces -

Page 1 of 2

Name product

STATEMENT BY KIWA

With this product certificate, issued in accordance with the Kiwa Regulations for Certification, Kiwa declares that legitimate confidence exists that the products supplied by

Name certificate holder

as specified in this product certificate and marked with the Kiwa[®]-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with Kiwa evaluation guideline BRL-K xxx "xxxxxxxxxxxxxxxx", dated xx-xx-xxxx.

Name Director
Kiwa

*Publication of this certificate is allowed.
Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.*

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20070103

Certification process
consists of initial and
regular assessment of:

- quality system
- product

Name Product

Technical specification

The products mentioned below belong to this product certificate;

products

APPLICATION AND USE

Scope / limits for correct use

MARKING

The Kiwa®-mark products are marked with ...

Place of the mark:

- place

Compulsory specifications:

- a;
- b;
- c;
- d.

RECOMMENDATIONS FOR CUSTOMERS

Check at the time of delivery whether:

- the supplier 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:

- name

and, if necessary,

- Kiwa Nederland B.V.

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

II Model IQC-scheme (informative)

Inspection subjects	Inspection aspects	Inspection method	Inspection frequency	Inspection registration
Raw materials or materials supplied: - recipe sheets - incoming goods inspection raw materials				
Production process, production equipment, plant: - procedures - working instructions - equipment - release of product				
Finished-products				
Measuring and testing equipment - measuring equipment - calibration				
Logistics				