



BRL-K14027  
Validated on 6 July 2026

# Evaluation Guideline BRL-K14027

Kiwa (technical approval with) product certificate for  
ductile iron pipes and fittings for wastewater transport

**kiwa**

## Preface

This Evaluation Guideline (BRL) was developed by the Technical Advisory Committee (CWK), in which all relevant parties in the field of ductile iron pipes and fittings for wastewater are represented. The Board of Experts Water Chain (CWK) also supervises the certification activities and updates this BRL if required. All references to Board of Experts in this evaluation guideline pertain to the Board of Experts Water Chain (CWK).

This BRL will be used by Kiwa in conjunction with the Kiwa Regulations for Certification and BRL K14100 'General requirements for products in contact with drinking water', which sets out Kiwa's general rules for certification.

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

Validation

This assessment directive has been validated by Kiwa on 06-07-2026.

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# 1 Introduction

## 1.1 General

In addition to §1.1 of BRL K14100.

Where BRL K14100 refers to the 'applicable' BRL, BRL K14027 is intended.

This BRL replaces BRL-K14027 dated 2015-10-16.

Quality declarations issued on the basis of that latter BRL shall in any case lose their validity one year after this BRL becomes binding.

## 1.2 Scope

In addition to §1.2 of BRL K14100.

The products are intended to be used as pipeline systems for the transport of wastewater with:

- a nominal diameter from DN 40 to DN 2000; and
- nominal pressures of PN 10, PN 16, PN 25 or PN 40;
- a maximum water temperature of 45 °C for products with DN ≤ 200 and 35 °C for products with DN > 200.

## 1.3 Acceptance of test reports provided by the supplier

No additions and/or deviations from §1.3 of BRL K14100.

## 1.4 Quality declaration

In addition to §1.4 of BRL K14100.

Quality declarations issued on the basis of this BRL shall be designated as a Kiwa product certificate.

## 2 Terminology

### 2.1 Definitions

In addition to BRL K14100 §2.1 the following terms and definitions are applicable:

- **Wastewater<sup>1</sup>**: all water, including atmospheric precipitation, which the holder disposes of, intends to dispose of, or is required to dispose of

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<sup>1</sup> Article 1.1 of the Environmental Management Act (Wet milieubeheer).

### 3 Procedure for obtaining a quality declaration

No additions and/or deviations apply to Chapter 3 of BRL K14100.

## 4 Product requirements

### 4.1 General

This chapter specifies the requirements with which the products shall comply. The test methods used to establish compliance with these requirements are described in chapter §5.

The certificate holder shall ensure a clear and unambiguous description of all relevant design data, including:

- the production process / realization process;
- constituent raw materials, materials, and products;
- the formulation, if applicable.

Any intended change to the above-mentioned parameters shall be reported to the certification body. The certification body shall assess whether the change may affect the attested performance(s) and the certified products, which may require a reassessment of the relevant performance(s).

The certification body determines what constitutes a significant change. Once it has been established that the products incorporating the proposed change comply with the requirements in accordance with Chapter 4, the change may be implemented in the certificate holder's production process.

### 4.2 Product requirements

The requirements applicable to the product are specified in the following standard, with the exception of those clauses for which requirements are specified in 4.2.2 and 4.3.3:

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| NEN-EN 598 | Ductile iron pipes, fittings and joints for wastewater applications – Requirements and test methods |
|------------|-----------------------------------------------------------------------------------------------------|

### 4.3 Additional product requirements

In addition to the requirements specified in 4.2.1 of NEN-EN 598, the following shall apply:

#### 4.3.1 *Rubber sealing profiles and flange gaskets*

In addition to Clause 4.1.3.1 of NEN-EN 598, rubber sealing profiles shall comply with BRL 2013.

#### 4.3.2 *Flanges*

In addition to Clause 4.1.3.2 of NEN-EN 598, non-standardized flanges are permitted, provided that the matching pipes and end plates required for type testing are made available.

#### 4.3.3 *External surface protective layers of pipes*

Where the external surface of the pipes is provided with a protective layer other than the zinc-aluminium alloy, with or without other metals, as specified in NEN-EN 598, Clause B.1.1, with a minimum mass of 400 g/m<sup>2</sup> and a finishing layer, this protective layer shall comply with: BRL-K767 – External coatings on metallic pipes.

#### 4.3.4 *External surface protective layers of fittings*

Where the external surface of the fittings is provided with a protective layer other than the epoxy coating specified in NEN-EN 598, Clause 4.5.2, this protective layer shall comply with: BRL-K767 – External coatings on metallic pipes.

## 5 Test methods

### 5.1 General

All applicable test methods are specified in EN 598. No additional test methods have been established.

## 6 Marking

### 6.1 General

The following markings and indications shall be applied to each product in a durable and clearly legible manner, in accordance with Clause 4.6 of NEN-EN 598:

- DN;
- PN;
- field of application, gravity sewer or pressure sewer;
- manufacturer's name and/or registered trademark;
- date or code of manufacture;
- type designation;
- material;
- reference to NEN-EN 598.

### 6.2 Certification mark

After the conclusion of a Kiwa certification agreement, the certification mark shall also be applied to the product in a durable and indelible manner.

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## 7 Requirements for the quality management system

No additions and/or deviations from chapter 7 of BRL K14100.

## 8 Summary of investigations required for type testing and inspections

This chapter provides a summary of the activities carried out within the framework of certification:

### 8.1 Evaluation matrix

| Requirement                                      | Article BRL                | Investigation within the scope of |                                                            |           |
|--------------------------------------------------|----------------------------|-----------------------------------|------------------------------------------------------------|-----------|
|                                                  |                            | Pre-certification                 | Supervision after certificate is granted <sup>a), b)</sup> |           |
|                                                  |                            |                                   | Check                                                      | Frequency |
| BRL-K4027                                        |                            |                                   |                                                            |           |
| Material requirements                            |                            |                                   |                                                            |           |
| Product requirements                             | 4.2                        | X                                 | X                                                          | 1x/year   |
| Rubber sealing profiles and flange gaskets       | 4.3.1                      | X                                 | X                                                          | 1x/year   |
| Flanges                                          | 4.3.2                      | X                                 | X                                                          | 1x/year   |
| External surface protective layers of pipes      | 4.3.3                      | X                                 | X                                                          | 1x/year   |
| External surface protective layers of fittings   | 4.3.4                      | X                                 | X                                                          | 1x/year   |
| Marking                                          |                            |                                   |                                                            |           |
| General                                          | 5.1                        | X                                 | X                                                          | 1x/year   |
| Certification mark                               | 5.2                        | X                                 | X                                                          | 1x/year   |
| NEN-EN 598                                       |                            |                                   |                                                            |           |
| Types of joints                                  | 4.1.3                      | X                                 | X                                                          | 1x/year   |
| Colour identification                            | 4.1.4                      | X                                 | X                                                          | 1x/year   |
| Dimensions                                       | 4.2                        | X                                 | X                                                          | 1x/year   |
| Material characteristics                         | 4.3                        | X                                 | X                                                          | 1x/year   |
| Coatings and linings for pipes                   | 4.4                        | X                                 | X                                                          | 1x/year   |
| Coatings and linings for fittings                | 4.5                        | X                                 | X                                                          | 1x/year   |
| Marking of pipes and fittings                    | See BRL-K14027, 6.1 en 6.2 |                                   |                                                            |           |
| Watertightness                                   | 4.7                        | X                                 | X                                                          | 1x/jaar   |
| Longitudinal deflection (axial) of the pipe      | 5.2                        | X                                 |                                                            |           |
| Ring stiffness of pipes                          | 5.3                        | X                                 |                                                            |           |
| Watertightness of pipes under gravity conditions | 5.4                        | X                                 |                                                            |           |
| Watertightness of elastomeric seals              | 5.5                        | X                                 | X                                                          | 1x/jaar   |
| Flange sealing                                   | 5.6                        | X                                 | X                                                          | 1x/jaar   |

| Requirement                            | Article BRL | Investigation within the scope of |                                                            |           |
|----------------------------------------|-------------|-----------------------------------|------------------------------------------------------------|-----------|
|                                        |             | Pre-certification                 | Supervision after certificate is granted <sup>a), b)</sup> |           |
|                                        |             |                                   | Check                                                      | Frequency |
| Pipes with screwed or welded flanges   | 5.7         | X                                 | X                                                          | 1x/jaar   |
| Chemical resistance to conveyed fluids | 5.8         | X                                 |                                                            |           |
| Resistance to abrasion                 | 5.9         | X                                 |                                                            |           |

- a) In the event of changes to the product or production process Kiwa shall, in consultation between the supplier, determine whether the product meets the performance requirements..
- b) During the inspection, the inspector checks the products against a selection of the product requirements as detailed above. The frequency of inspection visits is specified in §9.5 of BRL K14100.

## 8.2 Control of the quality system

The supplier's quality system shall be assessed by Kiwa. This assessment shall cover at least the aspects specified in Chapter 7 of BRL K14100

## 9 Agreements on the implementation of certification

No additions and/or deviations from chapter 9 of BRL K14100.

## 10 List of documents

### 10.1 Public law and Rules and Regulations

|                                               |                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BJZ2011048144<br>June 29 <sup>th</sup> , 2011 | Regulation of the State Secretary for Infrastructure and the Environment containing rules regarding materials and chemicals to be used in drinking water and hot tap water supply (Regulation on materials and chemicals for drinking water and hot tap water supply) <sup>1</sup> |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 10.2 Normative documents

| Number                 | Title                                                                                                                              | Version * |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------|
| BRL 2013               | Vulcanized rubber products for cold and hot non-drinking water applications                                                        |           |
| BRL-K767               | External coating of metal pipes                                                                                                    |           |
| BRL-K14100             | General requirements for products in contact with drinking water                                                                   |           |
| BRL-K14101             | Hygienic aspects for products in contact with drinking water and hot tap water                                                     |           |
| NEN-EN 598             | Ductile iron pipes, fittings and joints for wastewater applications – Requirements and test methods                                |           |
| NEN-EN 681-1           | Elastomeric seals – Material requirements for pipe joint seals used in water and drainage applications – Part 1: Vulcanized rubber |           |
| NEN-EN-ISO/IEC 17020   | Conformity assessment – Requirements for the operation of various types of bodies performing inspection                            |           |
| NEN-EN ISO/IEC 17021-1 | 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   | Conformity assessment – 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                                        |           |

\*) If no date of issue is indicated in this column, the current version of the document applies.

Note: If normative documents are dated then their validity is checked annually. Changes to the applicable normative documents are published on the services page of the Kiwa website.

<sup>1</sup> Valid from July 1<sup>st</sup>, 2017 onwards

## Model certificate (example)

# Certificate

Product certificate  
**K-XXXXXXX-X**

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Valid from **2026-XX-XX**

Replaces **K-0XXXXXX**  
Page **1 of 00**

### Ductile iron pipes and fittings for wastewater transport

#### 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 of business

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-K14027 "Ductile iron pipes and fittings for wastewater transport" dated dd-mm-jjjj, and
- BRL K14100 "General requirements for products in contact with drinking and hot tap water" dated dd-mm-jjjj.

Name  
Managing Director Nederland

*Publication of this certificate is allowed.*

*Advice: consult [www.kiwa.com](http://www.kiwa.com) in order to ensure that this certificate is still valid.*

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