



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

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.

Kiwa Nederland B.V.
Sir Winston Churchillaan 273
P.O. Box 70
2280 AB Rijswijk

Tel. 088 998 44 00
NL.Kiwa.info@Kiwa.com
www.kiwa.com

© 2025 Kiwa N.V.

All rights reserved. No part of this report may be reproduced, stored in a database or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photoprint, microfilm or any other means without prior written permission from the publisher.

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.

Contents

1	Introduction	3
1.1	General	3
1.2	Scope	3
1.3	Acceptance of test reports provided by the supplier	3
1.4	Quality declaration	3
2	Terminology	4
2.1	Definitions	4
3	Procedure for obtaining a quality declaration	5
4	Product requirements	6
4.1	General	6
4.2	Product requirements	6
4.3	Additional product requirements	6
4.3.1	Rubber sealing profiles and flange gaskets	6
4.3.2	Flanges	6
4.3.3	External surface protective layers of pipes	6
4.3.4	External surface protective layers of fittings	7
5	Test methods	8
5.1	General	8
6	Marking	9
6.1	General	9
6.2	Certification mark	9
7	Requirements for the quality management system	10
8	Summary of investigations required for type testing and inspections	11
8.1	Evaluation matrix	11
8.2	Control of the quality system	12
9	Agreements on the implementation of certification	13
10	List of documents	14
10.1	Public law and Rules and Regulations	14
10.2	Normative documents	14
	Model certificate (example)	15

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:

- **Wastewater¹**: all water, including atmospheric precipitation, which the holder disposes of, intends to dispose of, or is required to dispose of

¹ 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/m² 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.

KIWA

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 ^{a), b)}	
			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 ^{a), b)}	
			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 June 29 th , 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) ¹
---	--

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.

¹ Valid from July 1st, 2017 onwards

Model certificate (example)

Certificate

Product certificate
K-XXXXXXX-X

kiwa

Valid from **2026-XX-XX** Replaces **K-0XXXXXX**
Page **1 of xx**

Ductile iron pipes and fittings for the transport of waste water

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 cast iron wide-tolerance couplings and flange adaptors for use with pipes made of different materials—ductile cast iron, grey cast iron, steel, PVC-U, PVC-O, PE and fibre-cement—in contact with drinking water" dated dd-mm-jjjj,
- Amendment sheet dated dd-mm-jjjj,
- 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 in order to ensure that this certificate is still valid.

Kiwa Nederland B.V.
Sir Winston Churchilllaan 273
P.O. Box 70
2280 AB RUSWIJK
The Netherlands
Tel. +31 88 998 44 00
NL.Kiwa.Info@kiwa.com
www.kiwa.com

Information customer
Fill in text

Information customer
Fill in text

20250801