

## Product certificate **K46006/08**



Issued

2023-03-01

Replaces

K46006/07

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# Vulcanised rubber products for cold and hot drinking water applications

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

## **ANGST & PFISTER AG**

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-K17504 "Vulcanised rubber products for cold and hot drinking water applications" dated 10-10-2018, inclusive amendment sheet dated 30-08-2021

Ron Scheepers

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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Certification process consists of initial and regular assessment of:

- quality system
- product

## Vulcanised rubber products for cold and hot drinking water applications

#### PRODUCT SPECIFICATION

The products as specified in the table below fulfil the requirements of BRL-K17504. BRL-K17504 covers the requirements of EN 681-1, "Elastomeric seals - Materials requirements for pipe joint seals used in water and drainage applications - Part 1: Vulcanized rubber".

#### TECHNICAL SPECIFICATION OF THE PRODUCT

Rubber Compound:	EPDM 70.10-02 (EPDM 75.5/KW75F)				
Hardness:	70 IRHD	Field of application <sup>2</sup> :	II – WB	Remarks:	
Ozone Class <sup>1</sup> :	1	Production method:	Injection mould		
	Seal type	O-ring			
	Nominal Dimensions	5 - 400 mm			
	Cross section	0,5 – 10 mm			
Rubber Compound:	EPDM 70.10-07				
Hardness:	70 IRHD	Field of application <sup>2</sup> :	I + II – WA + WB	Remarks:	
Ozone Class <sup>1</sup> :	1	Production method:	Injection mould		
	Seal type	O-ring			
	Nominal Dimensions	6 - 120 mm			
	Cross section	2 – 6 mm			
Rubber		•	- <del>-</del>	<del>-</del>	
Compound:	EPDM 70.502-03				
Compound: Hardness:	70 IRHD	Field of application <sup>2</sup> :	I + II – WA + WB	Remarks:	
		Field of application <sup>2</sup> :  Production method:	I + II - WA + WB Injection mould	Remarks:	
Hardness:	70 IRHD			Remarks:	
Hardness:	70 IRHD	Production method:		Remarks:	
Hardness:	70 IRHD I Seal type Nominal	Production method: O-ring		Remarks:	
Hardness:	70 IRHD I Seal type Nominal Dimensions	Production method: O-ring 5 - 400 mm		Remarks:	
Hardness: Ozone Class¹:  Rubber	70 IRHD  I Seal type Nominal Dimensions Cross section	Production method: O-ring 5 - 400 mm		Remarks:	
Hardness: Ozone Class¹:  Rubber Compound:	70 IRHD I Seal type Nominal Dimensions Cross section EPDM 70.503-00	Production method:  O-ring  5 - 400 mm  0,5 - 10 mm	Injection mould		
Rubber Compound: Hardness:	70 IRHD I Seal type Nominal Dimensions Cross section  EPDM 70.503-00 70 IRHD	Production method:  O-ring  5 - 400 mm  0,5 - 10 mm  Field of application <sup>2</sup> :	Injection mould		
Rubber Compound: Hardness:	70 IRHD I Seal type Nominal Dimensions Cross section  EPDM 70.503-00 70 IRHD I	Production method:  O-ring  5 - 400 mm  0,5 - 10 mm  Field of application <sup>2</sup> :  Production method:	Injection mould		

- Ozone resistance class according to BRL-K17504:
  - I For products with a high risk of attack by ozone, for instance in case of separately supplied products without sufficient packaging or in case of connections with preinstalled rubbers under strain.
  - II For products for which a normal resistance to ozone is required.
  - III For rubbers which are never (partly) exposed to the open air when they are in tension. Transport shall always take place in sealed packages.
- 2 Field of application class according to BRL –K17504:
  - Water supply at temperatures up to 50 °C;
  - Water supply at temperatures intermittently up to 110 °C, or water supply up to 110 °C in serviceable piping systems;
  - III Hot water circulation systems based on the classification class 2 in ISO 10508;

Field of application class according to EN 681-1:

WA As in BRL-K17504 class I; WB As in BRL-K17504 class II;

WE As in BRL-K17504 class II, for IIR-copolymer.

Details of the products are included in the drawing list, which forms a part of the IQC schedule.

Kiwa authenticates this list. A copy of this list can be obtained from the producer.

#### Fitness for contact with drinking water

This product is approved on the basis of the requirements for hygienic aspects set in the "Regeling materialen en chemicaliën drink- en warm tapwatervoorziening" ("Materials and chemicals in the supply of drinking water and warm tap water Regulation" dated 01-07-2017; published in the

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Government

Gazette).

These hygienic aspects are based on two main criteria. The product shall permanently comply with:

- The product recipe approved during the assessment procedure. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa approval procedure for the hygienic aspects;
- Specific product requirements for the hygienic aspects.

The recipe and specific product requirements are laid down in the for confidentiality reasons undisclosed 'appendix hygienic aspects' to this certificate.

#### **MARKING**

The following marks and indications must be provided on each product\* and product packaging in a clear, legible and indelible way:

- the name of manufacturer or the deposited trade mark;
- Kiwa (or Kiwa® word mark) and additionally the Kiwa watermark ♥;
- the nominal dimension or dimensions;
- the nominal hardness;
- the year of manufacturing and preferably the quarter;
- type of rubber applied by means of the letter codes of the nomenclature according to ISO 1629;
- the application class (I, II or III);
- on products from blends, the letter B ("blend") shall be placed behind the first letter code;
- the ozone resistance class ("Ozone I, II or III"). For rubber rings made from two compounds the compound with the lowest class is valid.

If the dimensions of the products are such that the indications applied to them may impair the product, the products may be marked per package in consultation with the manufacturer, the buyer and Kiwa. Products produced by cutting or die cutting out of sheets may be marked per package.

#### **APPLICATION AND USE**

The rubber rings are meant to be used in cold water applications (≤ 25 °C) and warm water applications (≤ 60 °C) and especially for EPDM 70.503-00 also for hot water applications (> 60 °C).

#### **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:

ANGST & PFISTER AG

and, if necessary,

· Kiwa Nederland B.V.

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