CERTIFICATE

Product certificate
K14551/12

Issued *2021-04-01*

Replaces *K14551/11*

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

Bode GmbH

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" 10-10-2018.

Ron Scheepers
Kiwa

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

2871/180711

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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	Nominal Hardness [IRHD]	Ozone class[1]	Field of application class[2]	Cross Section [mm]	Nominal Dimensions [mm]	Product
EPDM B1-4771	70	I	I & II & III	1 - 10	2 - 150	O-ring
EPDM B1-4773	70	I	I & II	1 - 10	2 - 150	O-ring

Rubber rings can be supplied with Triboskin 88 or Triboskin 02-01-C000 lubrication.
The rings together with the lubrication form one product that conforms to BRL-K17504.

1 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:
- I Cold water supply;
- II Hot 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 according to EN 681-1:
- WA As in BRL-K17504 class I;
- WB As in BRL-K17504 class II;
- WE As in BRL-2013 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 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.

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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 (≤ 25 ºC) and warm (≤ 60 ºC) water supplies. Compound type EPDM B-4771 can also be used in hot (> 60 ºC) water circulation systems.

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:

- Bode GmbH

and, if necessary,

- Kiwa Nederland B.V.

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