Plastics Piping Systems intended for Drinking Water inside Buildings

Introduction

The certification with the Kiwa mark is based on piping systems, i.e. pipes and fittings assembled together. This means that for these systems it is not possible to certify a pipe or fitting on it's own.

The plastics piping systems are certified for 50 year life expectancy. For drinking water, the system is certified according to application class 2 and 8 or 10 bar:

	Temperature [°C]	Life time during 50 years
T _{design}	70	49 years
T _{max}	80	1 year
T malfunction	95	100 hours

The requirements to obtain and maintain the Kiwa mark are established in the evaluation guidelines (BRL) per type of plastics:

BRL K 536 A	PVC-C
BRL K 536 B	PP-R and PP-RCT
BRL K 536 C	PB
BRL K 536 D	PE-X
BRL K 536 E	PE-X / AI
BRL K 536 F	PP-R / AI
BRL K 536 G	PE-RT / AI
BRL K 536 H	PE-RT

Next to the mechanical properties also the toxicological aspects are required. Due to the national law concerning drinking water ("Waterleidingbesluit"). The materials used for the plastics pipes and plastics fittings must evaluated by HA (Hygienic Aspects) for possible migration of components in the drinking water

Application

For the application we need the following information about your product:

kiwa

- Type of plastics; (PVC-C/PP-R/PB/PE-X/ PE-RT/...);
- Supplier of the plastics;
- ISO 9080 data of the used plastics (50 year life expectancy);
- Drawings of the build up of the pipe/ fittings;
- Dimensions of the pipe/fitting;
- Production location of the pipe/fitting/piping system;

Initial inspection visit

An auditor will visit your company and take the test samples. He will audit the quality system to secure that the products can be produced with a constant quality. The production control data will be registered in an Internal Quality Schedule (IQS).

Type testing

The test program for mechanical tests is described in the BRL and in an internal guideline. The requirements are based on national- or preferably international product standards.

For the application we can accept test reports of identical tests, carried out by laboratories that are accredited according to EN-ISO/IEC 17025 and recognized by Kiwa. Please send the test reports along with the application.

Certification

When the initial inspection visit, and the type testing are finished with a good result the certificate will be issued. From a half year later, the inspection visits will start.

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Inspection visits

The inspector will visit the company four times a year. When the company has an ISO 9001 certificate the frequency will be lowered to two times a year. Each year samples will be taken for examination at the KIWA laboratory.

Certificate

The certificate contains information of the products which are covered by the certificate, next to the logistic information and the contract for maintaining the certificate. Also regarding drinking water, a confidential part is issued which contains the Hygienic Aspects (HA) information.

Private label

For an importer of a plastics piping system it is possible to have a copy of the certificate from the original producer on your own name. For this the original producer needs to grand permission. Also, the brand name of the product can be changed in the new private label certificate.

One Stop Shopping

Kiwa offers you the service of dealing with certification/testing for other countries and Quality marks. When you are interested in this service, please contact us with your specific request.

More information:

Toxicological aspects HA:

<u>https://services.1kiwa.com/utilities/kiwa-water-mark</u> PVC-C:

<u>http://www.kiwa.nl/upload/BRL/EN/K536 A.pdf</u> PP-R en PP-RCT :

<u>http://www.kiwa.nl/upload/BRL/EN/K536_B.pdf</u> PB:

 http://www.kiwa.nl/upload/BRL/EN/K536 C.pdf

 PE-X:

 http://www.kiwa.nl/upload/BRL/EN/K536 D.pdf

PE-X/AI:

<u>http://www.kiwa.nl/upload/BRL/EN/K536 E.pdf</u> PP-R/AI

<u>http://www.kiwa.nl/upload/BRL/EN/K536 F.pdf</u> PE-RT/AI:

<u>http://www.kiwa.nl/upload/BRL/EN/K536 G.pdf</u> PE-RT:

http://www.kiwa.nl/upload/BRL/EN/K536 H.pdf

or visit our website at: www.kiwa.com

For questions, more information or a quotation for this certification, please contact:

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