

Composition

Unplasticized polyvinyl chloride K67 (PVC-U) is alloyed with a calcium zinc stabilizer and filler. Therefore, our PVC-pipe doesn't contain any lead.

PVC pipe is considered a sustainable product. The reason is the long lifetime and good conditions for reprocessing after that. In addition, the chlorination of polyethylene is a solution to process waste from the production of aluminium in a responsible manner.

Colour

Pressure tubes are fitted with an iron grey pigment, impenetrable to light. Upon request, almost all RAL colours can be manufactured by approximation. As a minimum purchase the content of one mixer 1600kg applies. Also upon request, multilayer pipes are manufactured in various colours.

Property	Value	Unit
Density	1.4	g/cm ³
Softening point	80	°C
Linear expansion coefficient	0.06 – 0.08	mm/°C.m
Elongation at break	>80	%
Tensile strength 1 hour	42	N/mm ²
Tensile strength 50 years	25	N/mm ²
Permissible wall stress (ISO)	10	N/mm ²
Change in length, load at nominal pressure	1.1	mm/m

Shock resistance

To guarantee sufficient resistance to external shocks and impacts under normal conditions of use, the pipes undergo a test in accordance with NEN-EN 744 and ISO 3127.

Pressure resistance

To guarantee sufficient resistance to internal water pressure under normal operating conditions, the pipes undergo a test in accordance with NEN-EN 921 and ISO 1167.

Chemical resistance

PVC is resistant to most acids, salt solutions, water-soluble compounds and alkalis.

PVC is not resistant to aromatic and chlorinated hydrocarbons. More specifically, avoid contact with: acetone, acetic acid, benzene, benzole, bromine, chlorine, chloroform, ether, naphthalene, oleum, nitric acid, toluene, tetrachlorethylene, trichloroethene, xylene, and sulphuric acid.

UV resistance

Because of the influence of light PVC pipe can discolour. Scientific studies show that ultraviolet light discolours PVC and that also other material properties are affected, but in most cases does not have any significant effects.

Product line

Dimensions and tolerances

External diameter	Tolerance
Ø 10 to Ø 63	-0 +0.2
Ø 75 to Ø 125	-0 +0.3
Ø 140 to Ø 160	-0 +0.4

Length	Tolerance
all pipe lengths	-0 +20

Bell-end length	min	max
pipe Ø 16, Ø 20, Ø 25, and Ø 32	30	40
pipe Ø 40, and Ø 50	40	50
pipe Ø 63	50	70
pipe Ø 75	60	80
pipe Ø 90	70	90
pipe Ø 110	80	100
pipe Ø 125	90	110
pipe Ø 160	110	130
pipe Ø 200	130	155

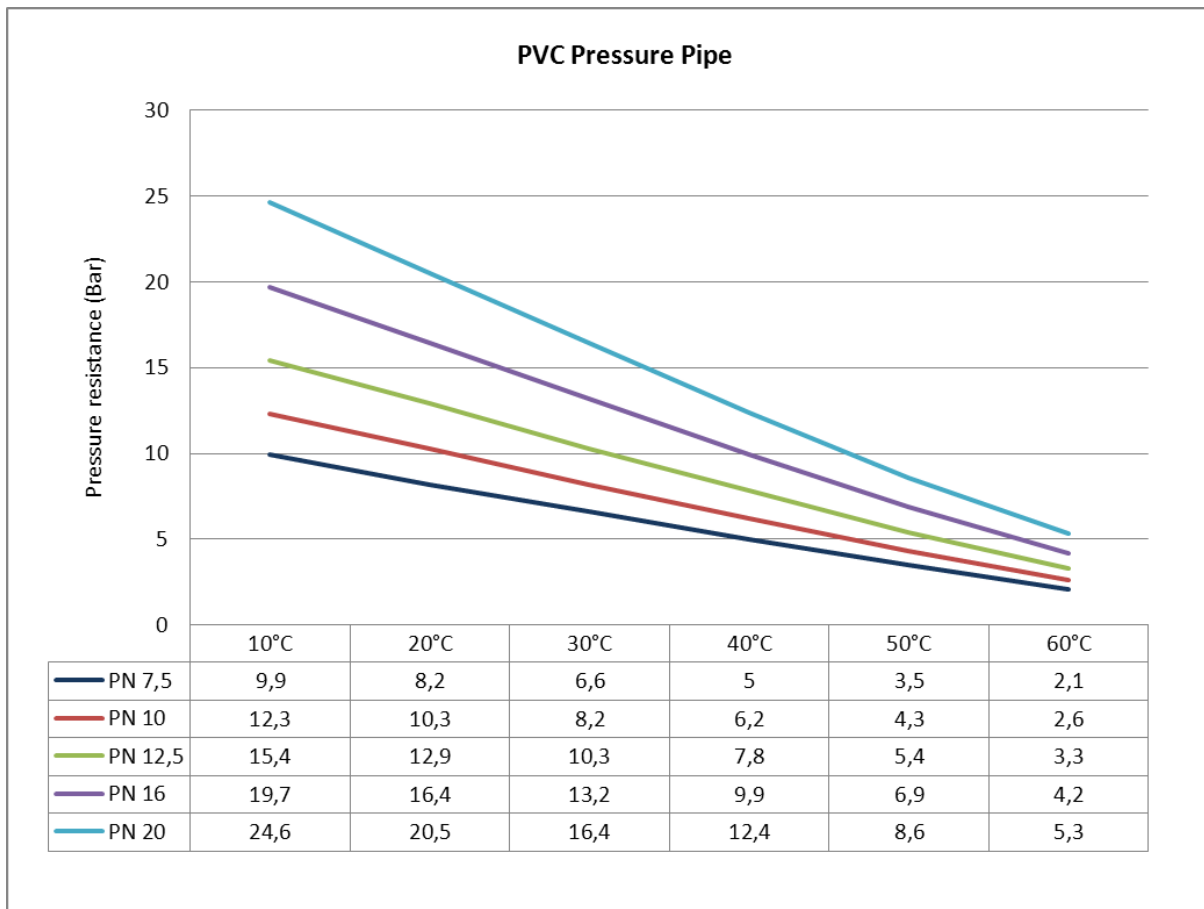


Usage

The PVC pipes are designed to have an operational lifespan of about 25 years under normal conditions of use.

Normal conditions of use include:

- An environment and water temperature between 0°C and +60°C.
- A maximum utilisation pressure as shown in the following chart.



In addition, make sure you take account of possible increased external loads and/or chemical influences that a PVC pipe can be exposed to and that can shorten its lifespan.

Identification

At a spaced distance of ± 1 m: production code (ID/tracking), dimensions, and pressure rating according to ISO 1452-2. A sticker is attached to packaging units listing the dimensions, pipe length, number of lengths, number of meters.



Instructions for use

When working with the PVC pipes, employees should be familiar with the appropriate installation methods used for this type of product. Applicable local and national laws and regulations must be observed. Before installation, ensure that the PVC pipe is suited to the intended application. This should include visually checking the product for defects. Do not use pipes that are unsuitable or have external defects. Installation should be carried out in a manner that avoids damage, defects, or permanent deformations.

Storage

Store the pipes in a dry and shady location. Do not allow the pipes to be exposed to extreme temperatures or temperature changes. Prevent the pipes from becoming contaminated.

Gluing instructions for socket-spigot connection:

Preparation:

For optimum adhesion, the parts to be bonded must be clean, dry, and free from grease.

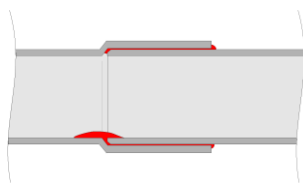
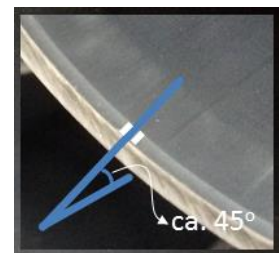
Gluing:

Only glue when the temperature is above 5°C and humidity is below 70%.

For a diameter of up to 50 mm, use SABA 914. For 63 mm and greater, use SABA S3.

Apply a thin layer of glue on the inside of the socket. Use firm lengthwise strokes to apply plenty of glue to the pipe-end/spigot. Slide the glued parts into each other without twisting or prizing. Fasten the connection together until the glue has set. Remove any excess glue. Wait at least 15 minutes before handling the glued parts.

Pipes manufactured by Weterings Plastics have an unique bevel on the bell side of the pipe, so that glue is distributed evenly and creates a better connection (see figure).



NOTE: Excess use of glue and/or using an incorrect gluing technique can cause puddles of glue to form in the pipe (see diagram). Puddles will weaken the PVC, which will eventually cause cracks. So, for certainty, glue with care!

The bonded connection is ready for use after 24 hours.