



# Uponor

## Uponor Barrier PLUS

Uponor Barrier PLUS is a new pressure pipe system for potable water for use in polluted soil and in risk areas. The pipe has a fully plastic and seamless barrier layer and is available in diameters OD 32 - 250mm in pressure classes PN10 and PN16. Together with Barrier Wrap joint protection it is a completely plastic system.

Uponor Barrier PLUS safeguards potable water from toxic chemicals, bad taste and odours for at least 50 but even up to 100 years. It provides chemical resistant pipe systems when renovating existing pipelines or building new in polluted soil or other high-risk areas.

- ✓ The first 100% plastic infra barrier pipe
- ✓ Safeguards potable water from toxic chemicals
- ✓ 50+ years service life
- ✓ Easy to peel enabling safe and fast welding
- ✓ Available in long lengths

### Pipe lengths

	6m	12m	50m	100m
OD 32-63mm	■		■	
OD 75-110mm		■		■
OD 160-250mm		■		

### Technical data

Min. bending radius	50 x d <sub>e</sub>
Recommended min. bending radius	100 x d <sub>e</sub>
Max. use temperature under pressure	+ 40°C
Min. installation temperature	- 20°C
Min. installation temperature coils	- 15°C
Approvals (core pipe)	EN12201-2, NPM
Drinking water approvals (core pipe)	DK-Vand, FI-mark

## Permeability of contaminants

	PE100 pressure pipe	Barrier PLUS pressure pipe	
<b>Heavy metals, examples</b>			
Cadmium	x	x	
Chromium	x	x	
Copper	x	x	
Lead	x	x	
Nickel	x	x	
Zinc	x	x	
<b>Salts, examples</b>			
Ammonium nitrate	x	x	
Sodium	x	x	
Sodium chloride	x	x	
<b>Bases, examples</b>			
Ammonia	x	x	
Calcium hydroxide	x	x	
Caustic soda	x	x	
<b>Chlorinated aliphatic hydrocarbons, examples</b>			
1,1-dichloroethylene	-	x	
1,2-dichloroethane [1,2-DCA]	-	x	Barrier layer material has been tested
Cis-1,2-dichloroethylene	-	x	
Dichloromethane [DCM]	-	x	Barrier layer material has been tested
Tetrachloroethylene [PCE]	-	x	Barrier layer material has been tested
Trans-1,2-dichloroethylene	-	x	
Trichloroethylene [TCE]	-	x	Barrier PLUS pipe has been tested
Vinyl chloride	-	x	
<b>Aromatic hydrocarbons, examples</b>			
Benzene	-	x	Barrier layer material has been tested
Benzo(a)pyrene	-	x	Barrier layer material has been tested
Ethylbenzene	-	x	Barrier layer material has been tested
P-dichlorobenzene	-	x	Barrier PLUS pipe has been tested
Toluene	-	x	Barrier PLUS pipe has been tested
Xylene	-	x	Barrier material has been tested
<b>Aliphatic hydrocarbons, examples</b>			
Iso Octane	-	x	Barrier PLUS pipe has been tested

x = No permeation

The listed contaminants are commonly found in the ground or included because of their permeation behavior. Inorganic pollution like heavy metals, salts and bases do not permeate polyethylene.

Hydrocarbon compounds are common contamination sources in soil. Some of them are converted from well-known chemicals, for example petroleum-derived chemicals such as gasoline, kerosene, bitumen etc. Others have been used as solvents or can be derived from other chemicals.