



Tio PE-RT EVOH pipe can be easily bent and curved in cold without special tooling, saving unions and installation time. Layers are very resistant to calcium, dirt and substances derived from galvanic corrosion. It weighs 7 times less than copper and 13 times less than iron on equivalent diameters. It does not modify the organoleptic characteristics of drinking water and the corrosion absence avoid proliferation of bacteria. Providing energy savings by reducing heat loss. Much lower roughness than metallic pipes reducing energetic consumption and allowing a higher flow with the same internal pipe diameter. Recovering the original shape when hot air is applied allowing it to be repaired.

**Applications:**

- Heating and Underfloor
- Industrial Facilities
- Surface Heating/Cooling
- Cooling Systems
- Snow and Ice Removal Systems
- Hot and Cold Water Distribution

**Classification according to service conditions**

Application class	Application	Type of temperature	Temperature (°C)	Time (years)
1	Hot water (60°C)	Design temperature	60	49
		Maximum design temperature	80	1
		Malfunction temperature	95	0.0114
2	Hot water (70°C)	Design temperature	70	49
		Maximum design temperature	80	1
		Malfunction temperature	95	0.0114
4	Radiant floor heating and low temperature radiators	Design temperature	20	2.5
		Design temperature	40	20
		Design temperature	60	25
		Maximum design temperature	70	25
		Malfunction temperature	100	0.0114
5	High temperature radiators	Design temperature	20	14
		Design temperature	60	25
		Design temperature	80	10
		Maximum design temperature	90	1
		Malfunction temperature	100	0.0114

For conditions on the table (up to 6 bar and 80°C) the lifetime of the pipe is 50 years

Physical Properties			
Material:	Polyethylene with high temperature resistance	Internal pressure resistance	> 1 hour (s=9.9 Mpa, 20°C)
Density:	> 0,941 g/m3		> 22 hours (s=3.9 Mpa, 95°C)
Working temperature range:	From -20°C to 70°C		> 165 hours (s=3.7 Mpa, 95°C)
Maximum temperature:	110°C		> 1000 hours (s=3.5 Mpa, 95°C)
Thermal conductivity (60°C):	0.4 W/m-K		> 1 year (s=1.9 Mpa, 110°C)
Thermal expansion rate:	1.8-10-4/K		
Oxidation Induction Time (OIT):	> 40 min		

**Certifications\***

**AENOR (Spain), DIN CERTO (Germany), IIP (Italy), KOMO (Netherlands)**

\* Standardized certifications according to EN ISO 22391

Product Code	Product Description
TIOPER0001	100m 3 Layer PE-RT Pipe 16 X 2.0mm
TIOPER0002	240m 3 Layer PE-RT Pipe 16 X 2.0mm
TIOPER0003	500m 3 Layer PE-RT Pipe 16 X 2.0mm
TIOPER0004	80m 3 Layer PE-RT Pipe 12 X 2.0mm
TIOPER0005	240m 3 Layer PE-RT Pipe 12 X 2.0mm
TIOPER0006	400m 3 Layer PE-RT Pipe 20 X 2.0mm
TIOPER0007	80m 3 Layer PE-RT Pipe 10 X 1.25mm
TIOPER0008	240m 3 Layer PE-RT Pipe 10 X 1.25mm