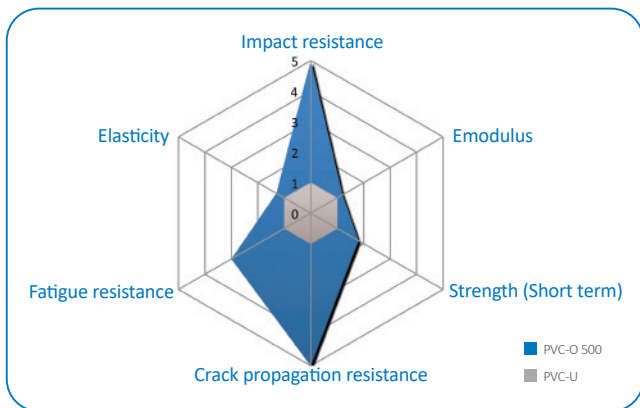




Oriented PVC pipes

TOM® PVC-O pipe is the most advanced pipe material for the conveyance of high-pressure potable water, pressure sewer, reclaimed water, fire protection, and other uses. They are produced exclusively with Molecor's air based technology that provides the highest Molecular Orientation, optimizes fabrication costs and reduces environmental footprint.

Molecor's PVCO manufacturing process is continuous and automated, which ensures maximum product reliability as every pipe manufactured is pressure tested during the orientation process. In addition, **TOM® PVC-O** pipes manufactured by Molecor come with a 50-year guaranteed warranty.



Mechanical improvements

The Molecular Orientation process drastically **improves the physical and mechanical properties of PVC**, such as increased internal pressure capabilities, higher impact strength, and enhanced hydraulic capacity.

TOM PVCO Pipelines have a 100-year minimum service life due to resistance to breaks, cyclic pressures from regular operation, and ease of installation.



Sustainable properties

Due to the molecular orientation manufacturing process, TOM PVCO pipe require 43% less petroleum and other additives than other plastics of the same dimensions. Additionally TOM PVCO pipe has a 100-year minimum service life, chemically inert and fully recyclable which results in a lower environment impact.



Joints and Watertight Gaskets

The watertight seal includes a polypropylene (PP) ring and a synthetic Ethylene-propylene diene monomer (EPDM) rubber lip which allows the seal to be integrated into the pipe, avoiding joint displacement or movement during installation.

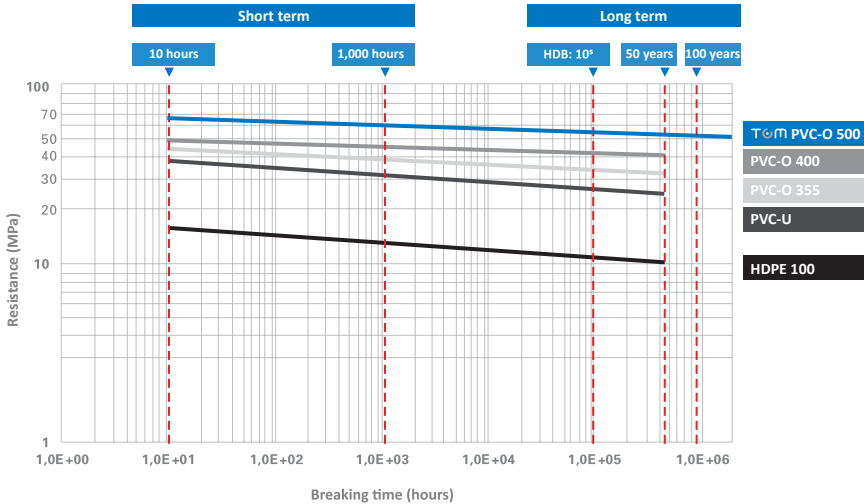
Characteristic	Units	Value
Elastomer hardness	IRHD	60 ±5

Guarantee exclusively applicable to PVC-O pipes manufactured in the Loeches (Madrid, Spain) and Antequera (Málaga, Spain) production centers with AENOR Product Certificate No. 001/007104 and 001/007374 respectively, in accordance with UNE-EN 17176-1-2 and 5.



Long term hydrostatic resistance

Stress Regression Line



TOM PVC-O pipe provides the highest molecular orientation through Molecor's patented air based technology that gives the pipe a greater resistance to stress creep, increased long-term performance and widens the internal hydraulic capacity compared to other thermoplastic piping materials.

TOM® PVC-O Pipes				
EN 17176	ISO 16422	ASTM IPS	ASTM C103	AWWA C103
Nominal Pressure (PN)				
bar	bar	psi	psi	psi
12.5 16	12.5 16	160	160	165
20 25	20 25	200	200	235
		250	250	305
Nominal Diameter (DN)				
mm	mm	inch	inch	inch
90	90			
110	110	4"	4"	4"
125	125			
140	140			
160	160	6"	6"	6"
180	180			
200	200	8"		
225	225		8"	8"
250	250			
280	280	10"	10"	10"
315	315	12"		
355	355	14"	12"	12"
400	400	16"	14"	14"
450	450	18"	16"	16"
500	500	20"	18"	18"
560	560		20"	20"
630	630	24"		
			24"	24"
710	710	28"	26"	26"
800	800	30"	30"	30"
		32"		
900	900	36"	34"	34"
1000	1000	40"	38"	38"
1100	1100	42"	40"	40"
1200	1200	48"	42"	42"
			48"	48"

Applicable Standards

TOM® PVC-O pipes are in accordance with the **International Standard ISO 16422:2014**, applied to "Pipes and joints made of oriented unplasticized poly(vinyl chloride) {PVC-O} for the conveyance of water under pressure" and follow NSF/ANSI/CAN 61 standard for potable water applications.

The **TOM® pipes** and **ecoFITM® fittings** manufactured in our production center of Loeches follow **NSF/ANSI/CAN 61** standard for potable water applications.

Other international standards applicable to PVC-O are as follows. Molecor could manufacture pipes according to these standards under request.

- EU: UNE-EN 17176:2019 standard, applied to "Plastic piping systems for water supply and for buried and above ground drainage, sewerage and irrigation under pressure- Oriented unplasticized poly(vinyl chloride) (PVC-O). Part 1: General, Part 2: Pipes and Part 5: Fitness for purpose of the system" (based on European Standard EN 17176).
- Canada: CAN/CSA-B137.3.1-13 "Molecularly oriented polyvinylchloride (PVC-O) pipe for pressure applications".



Certified to NSF/ANSI/CAN 61

For TOM DN90-1000 mm and ecoFITM DN110-400 mm



TOM® PVC-O pipes are supplied in total length of 20 ft ± 1 in. (including the length limit mark for the socket). The inside diameters may be subjected to variation according to manufacturing tolerances. The diameters in blue are not contemplated in the standards.