Inert Material – Safe for Drinking Water

Since PEX piping is used to transport potable water, it must comply with federal regulations for public safety. PEX materials are inert (not chemically reactive) and cannot contaminate the potable water passing through them. The fittings are mechanical and do not require the use of solvents or chemicals that might leach into the water when the system is first used.

Testing and certification must comply with NSF/ANSI Standard 61: *Drinking Water System Components - Health Effects,* and Standard 14: *Plastic Pipe System Components and Related Materials.* The primary focus of Standard 61 is to establish minimum health effect requirements for chemical contaminants and impurities that are indirectly imparted into drinking water from products, components, and materials used in potable water systems. PEX piping systems are tested at water pH levels from 5.0 to 10.0, both excessive acidity and alkalinity, beyond levels encountered in potable water systems. PEX pipe does not corrode, and it is resistant to mineral build-up. NSF/ANSI Standard 14 covers physical, performance, and health effect requirements for plastic piping system components used in potable hot- and cold-water distribution systems.

PEX Piping Dimensions and Flow Characteristics

Table 3.1 – PEX Pipe Dimensions

Nominal Diameter	OD	Wall	ID	Weight
	inches[1]	inches[2]	inches	lb/ft
3/8”	0.500	0.075	0.350	0.05
1/2”	0.625	0.075	0.475	0.06
3/4”	0.875	0.102	0.671	0.10
1”	1.125	0.130	0.865	0.16
1 1/4”	1.375	0.160	1.055	0.25
1 1/2”	1.625	0.190	1.245	0.35
2”	2.125	0.248	1.629	0.60

[1] Average OD from ASTM F 876
[2] Average wall thickness from ASTM F 876