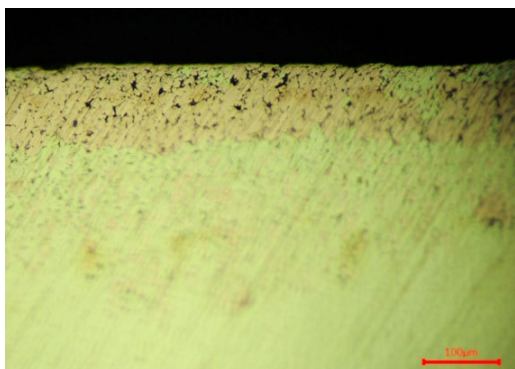


Dezincification Resistance (DZR) Requirement



Dezincification Resistance (DZR) testing evaluates the resistance of copper alloys against corrosion that can weaken plumbing components and reduce service life.

PUB has tightened the requirements for copper alloy water fittings to align with international potable water standards.

Under the revised requirements, selected copper alloy grades will be phased out for potable water use from 1 March 2027 (WSN 92413/90/202301/COPPERALLOY).

Allowed for supply between 1 March 2023 to end February 2027	Allowed for supply from 1 March 2027 onwards
<ul style="list-style-type: none"> Copper alloy grades: CW511L, CW602N, CW625N, CW626N, CW709R, CW724R, CW725R, CC491K, bronze and gunmetal Or Copper alloy grades as listed in the 4MSI Positive list of Compositions 	Copper alloy grades as listed in the 4MSI Positive List of Compositions (which also covers CW511L, CW625N, CW626N, CW724R and CW725R)

Symbol	Number	Cu (%)	Al (%)	As (%)	Fe (%)	Mn (%)	Ni (%)	P (%)	Pb (%)	Si (%)	Sn (%)	Other Elements	Zn (%)
CuZn38As	CW511L	61.5 – 63.5	≤ 0.05	* 0.02 – 0.1	≤ 0.1	* ≤ 0.1	* ≤ 0.1	-	* ≤ 0.1	-	≤ 0.1	≤ 0.2	Rem
CuZn35Pb1.5AlAs	CW625N	62.0 – 64.0	0.5 – 0.7	0.02 – 0.15	≤ 0.1	≤ 0.1	≤ 0.2	-	1.2 – 1.6	-	≤ 0.3	≤ 0.2	Rem
CuZn33Pb1.5AlAs	CW626N	64.0 – 66.0	0.8 – 1.0	0.02 – 0.15	≤ 0.1	≤ 0.1	≤ 0.2	-	1.2 – 1.7	-	≤ 0.3	≤ 0.2	Rem
CuZn21Si3P	CW724R	75.0 – 77.0	≤ 0.05	-	≤ 0.3	≤ 0.05	≤ 0.2	0.02 – 0.1	≤ 0.1	2.7 – 3.5	* ≤ 0.2	≤ 0.2	Rem
CuZn33Pb1AlSiAs	CW725R	64.0 – 67.0	0.1 – 0.3	0.04 – 0.08	≤ 0.3	≤ 0.04	≤ 0.2	≤ 0.02	* 0.4 – 0.6	0.1 – 0.3	≤ 0.3	≤ 0.2	Rem

*Contents restricted by 4MSI.

At Singapore Test Lab (STL), we provide comprehensive DZR testing services for copper alloy water fittings in full compliance with PUB's requirements. With our expertise, you can have complete peace of mind — we take the guesswork out of material selection so you can focus on what matters most.