ASTM Types - D1193-06

Type	Grade	Microsiemens(MIN)	Resistance(MIN)	pH	TOC	Total Solids(mg/kg)	Na(ppb)max	Chloride (ppb) max	Si(ppb)max	cfu/ml max	Endotoxins Eu/ml max
I		0.056	18		50	-	1	1	3		
I	A	0.056	18		50	-	1	1	3	10/1000	0.03
I	B	0.056	18		50	-	1	1	3	10/100	0.25
I	C	0.056	18		50	-	1	1	3	100/10	
II		1	1		50	-	5	3	3		
II	A	1	1		50	-	5	3	3	10/1000	0.03
II	B	1	1		50	-	5	3	3	10/100	0.25
II	C	1	1		50	-	5	3	3	100/10	
III		0.25	4		200	-	10	10	500		
III	A	0.25	4		200	-	10	10	500	10/1000	0.03
III	B	0.25	4		200	-	10	10	500	10/100	0.25
III	C	0.25	4		200	-	10	10	500	1000/100	
IV		5	0.2	5 - 8		-	50	50			
IV	A	5	0.2	5 - 8		-	50	50		10/1000	0.03
IV	B	5	0.2	5 - 8		-	50	50		10/100	0.25
IV	C	5	0.2	5 - 8		-	50	50		100/10	
						-					

BS EN ISO 3696 - 1995

Grade	1	0.1	10	N/A		-	N/A	N/A	10	N/A	N/A
	2	1	1	N/A		-	N/A	N/A	20	N/A	N/A
	3	5	0.2	5 - 7.5		-	N/A	N/A	N/A	N/A	N/A
						-					

NCCLS/CAP Types (1998)

Type	I	<0.1	>10	-	<50	0.1	-	-	<0.05	<10	-
Type	II	<1	>1	-	<200	1	-	-	<1	<1000	-
Type	III	<10	>0.1	5 - 8	<1000	5	-	-	<5	-	-

Pharmacopoeia standards

Separate pharmacopoeia are produced by a number of authorities, notably in the USA and Europe. Each specifies materials, including water, to be used in medical work. The standards for purified water are similar in each case. Extra criteria are set for water required for sterile applications. The standards for purified water given in the European Pharmacopoeia (EP) and in the US Pharmacopoeia (USP) are summarized below. Water for injection has stringent bacterial/pyrogen criteria and methods of preparation are specified.

Pharmacopoeia requirements for purity of 'purified water'

Properties	EP	USP
Nitrates	<0.2 ppm	-
Heavy metals	<0.1 ppm	-
TOC	<500 µg/L C	<500 µg/L C
Conductivity	<4.3 µS/cm at 20ºC	<1.3 µS/cm at 25ºC
Bacteria (guideline)	<100 CFU/ml	<100 CFU/ml