



**ULTRAPURE**  
**ULTRAPURE & INDUSTRIAL SERVICES, LLC**

Total Service and Support for Water Treatment Systems

**WATER QUALITY STANDARDS**

**Water Quality Standards for Haemodialysis**

Category	Substance	Symbol	AAMI max. level (Also recommended by the RA) *	From EC ** Pharmacopoeia
1	Aluminium	Al	0.01 ppm	0.01 ppm
1	Copper	Cu	0.1 ppm	♦
1	Fluoride	F	0.2 ppm	0.2 ppm
1	Nitrates	NO <sub>3</sub>	2 ppm	2 ppm
1	Sulphate	SO <sub>4</sub>	100 ppm	50 ppm
1	Zinc	Zn	0.1 ppm	0.1 ppm
1	Chloramines		0.1 ppm	
1	Free Chlorine	CL <sub>2</sub>	0.5 ppm	
1	Total Available Chlorine			0.1 ppm
2	Calcium	Ca	2 ppm	2 ppm
2	Magnesium	Mg	4 ppm	2 ppm
2	Potassium	K	8 ppm	2 ppm
2	Sodium	Na	70 ppm	50 ppm
2	Chlorides	Cl		50 ppm
3	Arsenic	As	0.005 ppm	♦
3	Barium	Ba	0.1 ppm	♦
3	Cadmium	Cd	0.001 ppm	♦
3	Chromium	Cr	0.01 ppm	♦
3	Lead	Pb	0.005 ppm	♦
3	Mercury	Hg	0.002 ppm	0.001 ppm
3	Selenium	Se	0.01 ppm	
3	Silver	Ag	0.005 ppm	♦
	pH			6-8 pH
	Oxidisable Substances			nil
	Ammonium			0.2 ppm
	Heavy Metals			0.1 ppm
	Microbial Contamination		TVC < 200 per ml	TVC < 100 per ml
	Endotoxins		10.0 EU/ml	< 0.25 EU/ml

- Categories
- 1 Toxic substances described in Dialysis literature.
  - 2 Non-toxic substances included in dialysis fluid.
  - 3 Substances described as toxic in Drinking Water literature.

\* From a draft document by the Standards Subcommittee of the Renal Association.

\*\* From 'Water for diluting concentrated haemodialysis solutions' Annex to the European Pharmacopoeia Fasciculé 16. (Adopted by the Council of Europe).

♦ Included in the global limit for Heavy Metals

AAMI The Association for the Advancement of Medical Instrumentation (USA) 1981

