

# Membranes and Water Temperature

Water temperature is important in membrane production rates. Lower water temperatures can reduce a membrane's production by as much as 70%. Use the temperature factor chart to determine a membrane's estimated performance.



## Reverse Osmosis Rejection Rates

Adjust from 77°F to a different temperature by multiplying Membrane Production Rate by Correction Factor

Reverse Osmosis Membranes are a semi-permeable membrane that reject the majority of dissolved solids and contaminants. Use the chart below to determine the estimated rejection rates for some common impurities.

Temperature Fahrenheit	Correction Factor
40°	.34
45°	.43
50°	.52
55°	.61
60°	.70
65°	.79
70°	.88
77°	1.0
80°	1.05
90°	1.23
100°	1.41
110°	1.59

Aluminum 97-98%	Cyanide 90-95%	Pyrogen 99+%
Ammonium 85-95%	Ferrocyanide 99+%	Radioactivity 95-95%
Arsenic 94-96%	Fluoride 94-96%	Radium 97%
Bacteria 99+%	Hardness 95-98%	Selenium 97%
Barium 96-98%	Iron 98-99%	Silica 85-90%
Bicarbonate 95-96%	Lead 96-98%	Silicate 95-97%
Borate 40-70%	Magnesium 96-98%	Silver 95-97%
Boron 60-70%	Manganese 96-98%	Sodium 94-96%
Bromide 93-96%	Mercury 96-98%	Strontium 96-99%
Cadmium 96-98%	Nickel 98-99%	Sulfate 99+%
Calcium 96-98%	Nitrate 93-96%	Sulfite 96-98%
Chloride 94-95%	Orthophosphate 98-99%	TDS 95-99%
Chromate 90-98%	Phosphate 99+%	Thiosulfate 99+%
Chromium 96-98%	Polyphosphate 98-99%	Virus 99+%
Copper 98-99%	Potassium 92%	Zinc 98-99%