

Appliance Settings— How Hard is Your Water?



Some water efficient appliances require the user to obtain information about the hardness of the treated water supply in order to set the water usage and/or detergent levels properly. You will either need to calculate the treated water hardness by using **milligrams per liter (parts per million)** OR **grains per gallon**—depending on your appliance set-up instructions.

Treated water supplied to Member Cities and Customers by the NTMWD is considered moderately hard. The water hardness levels vary from month to month.

The NTMWD provides a monthly **Water Quality Analysis** which can provide the data you need to calculate the water hardness setting for your appliance. Use the most current month/year report available at www.ntmwd.com/water_quality.html.

Here's how to calculate water hardness in **milligrams per liter (parts per million)**:

- Open the most current report
- Use this number _____

Here's how to calculate water hardness in **grains per gallon**:

- Open the most current report
- Divide this number by 17.12 _____

North Texas Municipal Water District
Water Analysis
Aug-2009

Mineral Analysis	Raw (mg/L)	Treated (mg/L)	Standards			
			EPA Primary (mg/L)	EPA Secondary (mg/L)	TCEQ Primary (mg/L)	TCEQ Secondary (mg/L)
Residue on Evaporation	278	308		500		1000
Silica (SiO2)	8.28	7.58				
Iron (Fe)	<0.200	<0.200		0.3		0.3
Calcium (Ca)	33.7	40.8				
Magnesium (Mg)	5.32	5.36				
Sodium (Na)	30.7	41.0				
Potassium (K)	4.79	4.77				
Bicarbonates (HCO3)	113	83.3				
Carbonates (CO3)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO4)	45.5	78.2		250		
Nitrite (NO2)	0.0610	<0.0200	1		1	
Nitrate (NO3)	0.124	0.0875	10		10	
Chloride (Cl)	39.7	41.0		250		300
Fluoride (F)	0.295	0.552	4.0	2.0		2.0
Phosphates (PO4)	0.0470	<0.0200				
	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)
Total Alkalinity	92.3	51.8				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	35.8	95.5				
Total Hardness	128	147				
Langelier Index		-0.366				
Trace Element Analysis						
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	<0.00508	<0.00500	0.01		0.01	
Barium (Ba)	0.0536	0.0411	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00490	0.103	1.3		1.3	1.0
Iron (Fe)	<0.200	<0.200		0.3		
Lead (Pb)	<0.00100	<0.00100	0.15		0.15	
Manganese (Mn)	0.0275	0.00166		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00269	0.00287				
Selenium (Se)	<0.00100	<0.00100	0.05		0.05	
Silver (Ag)	<0.00100	<0.00100		0.10		0.1
Zinc (Zn)	<0.0100	<0.0100		5		5
Other Analysis						
Chlorine Residual (mg/L)	-	3.42*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	7.39*	7.30*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	432	526				
Turbidity (NTU)	7.79	0.182*	0.3		0.3	
Threshold Odor Number	8F	1E				3