



## LIMITS FOR MAKE-UP WATER ANALYSIS FOR EVAPORATIVE COOLING UNITS FOR HVAC SYSTEMS

The following water quality is established for evaporative cooler water make-up. This water can then be cycled up 2 to 6 cycles to obtain the following stability indices.

Langelier Index =  $0.5 \pm 0.25$

Ryznar Index =  $6.0 \pm 0.5$

Puckorius Index =  $6.5 \pm 0.5$

CONSTITUENT	ALLOWABLE mg/l
Calcium Hardness (as CaCO <sub>3</sub> )	50 - 150 mg/l
Total Alkalinity (as CaCO <sub>3</sub> )	50 - 150 mg/l
Chlorides (as Cl)	<50 mg/l
Silica (as SiO <sub>2</sub> )	<25 mg/l
Iron (as Fe)	<0.2 mg/l
Conductivity	<750 $\mu$ mhos
Suspended Solids	<5 mg/l
pH	7.0 to 8.5

### Source of Water:

Deep wells or municipal water supplies are recommended.

Lake and river water should be filtered and chemically treated for microbial growth.

Seawater, brackish water and reclaimed water are not recommended.

Any deviation outside of these suggested limits should be discussed with Munters Corporation.