

Bru'n Water

[Link to Bru'n Water website for updates and to donate](#)

Water Profile Adjustment Calculator

Hover cursor over cells w/ red triangles to display helpful comments

Desired Water Profile	Calcium (ppm)	Magnesium (ppm)	Sodium (ppm)	Sulfate (ppm)	Chloride (ppm)	Bicarbonate (ppm)	Cations (meq/L)	Anions (meq/L)	Total Hardness	Alkalinity (ppm)	RA (ppm)	SO ₄ /Cl Ratio
Yellow Bitter	50.0	10.0	5.0	105.0	45.0	0.0	3.5	3.5	166	0	-42	2.3
Existing Water Profile	39.0	12.0	21.0	18.0	51.0	147.7	3.8	4.2	147	122	87	0.4
Dilution Water Profile												
Distilled Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	
Dilution Percentage	0	oz/gal	0.0	pt/gal	< These conversions are provided for your convenience							
Diluted Water Profile	39.0	12.0	21.0	18.0	51.0	147.7	3.8	4.2	147	122	87	0.4
Target Water Adjustment (ppm)	11.0	-2.0	-16.0	87.0	-6.0	-147.7	-0.3	-0.8	19			
Actual Water Adjustment (ppm)	15.4	0.0	0.0	36.9	0.0	-231.4	0.8	-3.0	38			
Finished Water Profile	54.4	12.0	21.0	54.9	51.0	-83.7	4.6	1.2	185	-69	-115	1.1

Total Water Additions

								Mash		Sparge	
								Water Volume (gal)	9.8	Water Volume (gal)	0.0
Water Additions	Addition (gram/gal)	Calcium (ppm)	Magnesium (ppm)	Sodium (ppm)	Sulfate (ppm)	Chloride (ppm)	Bicarbonate (ppm)	Total Mineral Additions (grams)	Total Mineral Additions (grams)		
Gypsum (CaSO ₄)	0.25	15.4			36.9			2.4	0.0		
Epsom Salt (MgSO ₄)	0.00		0.0		0.0			0.0	0.0		
Canning Salt (NaCl)	0.00			0.0		0.0		0.0	0.0		
Baking Soda (NaHCO ₃)	0.00			0.0			0.0	0.0	Not Recommended		
Calcium Chloride (CaCl ₂)	0.00	0.0				0.0		0.0	0.0		
Chalk (CaCO ₃)	0.00	0.0					0.0	0.0	Not Recommended		
Pickling Lime (Ca(OH) ₂)	0.00	0.0					0.0	0.0	Not Recommended		
Magnesium Chloride (MgCl ₂)	0.00		0.0			0.0		0.0	0.0		
Acid	Addition (mL/gal)				Sulfate (ppm)	Chloride (ppm)	Bicarbonate (ppm)	Total Acid Addition (mL)	Total Acid Addition (mL)		
Lactic	1.25	Strength	88.0	%	0.0	0.0	-231.4	12.2	See Sparge Sheet		

Add CaSO₄ & CaCl to replace Lime in Sparge Water?

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Most mineral additions should be added to both the mash water and sparge water. DO NOT add alkalinity producing minerals such as chalk, baking soda, or pickling lime to sparge water since that counteracts the desired sparge water acidification. Either reserve those minerals from the sparge water and add directly to the kettle, or delete them and substitute other calcium or sodium containing minerals to make up for their contributions. Do not use the acid amount calculated for Mash Adjustment from this sheet for the Sparge Water adjustment. Use the acid amount calculated on the Sparge Acidification sheet for Sparge Water. **Add acid prior to heating the water.**

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