

## Blue Moon Clone-1

v101.0

*transforming water into brewing liquor since 1988*

Enter the values from your water analysis in the corresponding cells in the SOURCE row.

Enter the mineral profile for a beer style in the corresponding cells in the TARGET row.

If you will not adjust one of the minerals, enter either "0" or the SOURCE amount in that TARGET cell.

Adjust the Alkalinity Target value to yield a mash pH of 5.1-5.3. The usual Target value is near 0, or in the range of -15 to 30.

The option for increasing carbonate is not normally exercised. The Carbonate Target value should usually be zero.

PROFILES	pH	Hardness	Alkalinity	Chloride	Magnesium	Sodium	Carbonate
Source	7.0	17 mg/L	13 mg/L	20 mg/L	1.37 mg/L	11.6 mg/L	0 mg/L
Target		425 mg/L	0 mg/L	20 mg/L	5 mg/L	5 mg/L	0 mg/L

### LIQUOR TREATMENT

Enter the entire volume of brewing liquor to treat:  gallons

Add these amounts of Mineral Salts and Acid to adjust your brewing liquor to the Target profile:

15.6 grams Calcium Sulfate Dihydrate	about 3.9 teaspoons
0.6 grams Epsom Salts	about 0.1 teaspoons
4 ml of 10% lactic acid	about 0.8 teaspoons or 0.3 tablespoons

Enter an "x" next to the Mineral Salts that you use to adjust your brewing liquor:

MINERAL SALT	COMMON NAME
<input type="checkbox"/> Calcium Sulfate Anhydrous	"Plaster of Paris"
<input checked="" type="checkbox"/> Calcium Sulfate Dihydrate	"Gypsum"
<input type="checkbox"/> Calcium Chloride Anhydrous	
<input checked="" type="checkbox"/> Calcium Chloride Dihydrate	
<input type="checkbox"/> Calcium Carbonate	"Precipitated Chalk"
<input checked="" type="checkbox"/> Magnesium Sulfate	"Epsom Salts"
<input checked="" type="checkbox"/> Sodium Chloride	"Kosher Salt"

Enter an "x" next to the Food Grade Acid that you use to adjust your brewing liquor:

FOOD GRADE ACID
<input type="checkbox"/> 85% lactic acid
<input checked="" type="checkbox"/> 10% lactic acid
<input type="checkbox"/> 85% phosphoric acid
<input type="checkbox"/> 23% phosphoric acid
<input type="checkbox"/> 95% sulfuric acid
<input type="checkbox"/> citric acid, monohydrate

If Water Witch errors, check that for each Target Value that exceeds its Source Value an "x" has been entered next to the corresponding Mineral Salt, or reduce the Target value to "0". Please report any other errors to [vpb@vermontbrewery.com](mailto:vpb@vermontbrewery.com)