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# The Importance of Water for Brewing Coffee

GORDI

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# 98% Water

pH, TDS, dH, GH, KH... WTF?!?!

We'll be discussing 2 most relevant parameters when talking about water for coffee

1. Total Hardness
  2. Alkalinity (Acid Buffer Capacity)
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# Why? What are They?

## Total Hardness (GH)

- Carbonate Hardness + Permanent Hardness
- Or you could say The Amount of Magnesium and Calcium ions

## Alkalinity (Acid Buffer Capacity)

- The capacity of an aqueous solution to neutralize acid
  - Normally made of Bicarbonates, therefore it commonly referred to as Carbonate Hardness (KH)
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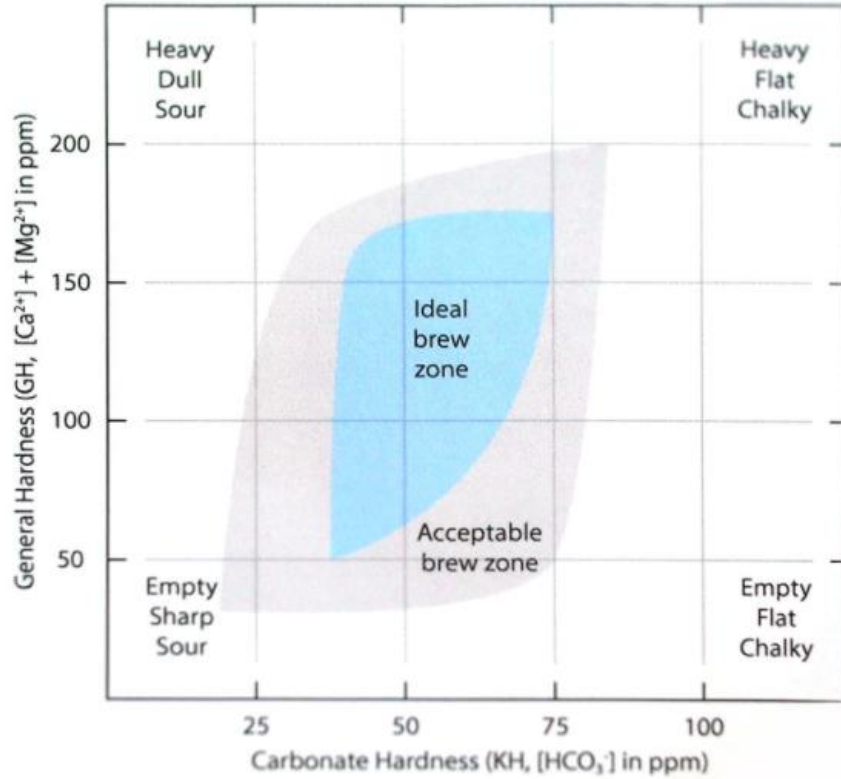
# Carbonates - Kings of Brewing Water

## Buffer too High

- The positive acidity in coffee taste will be softened by this buffer
- It becomes flat and dull

## Buffer too Low

- The taste will be vinegary and sour
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**$50 < GH < 175$**

**$40 < KH < 75$**

## pH Meter



### Digital PH Meter

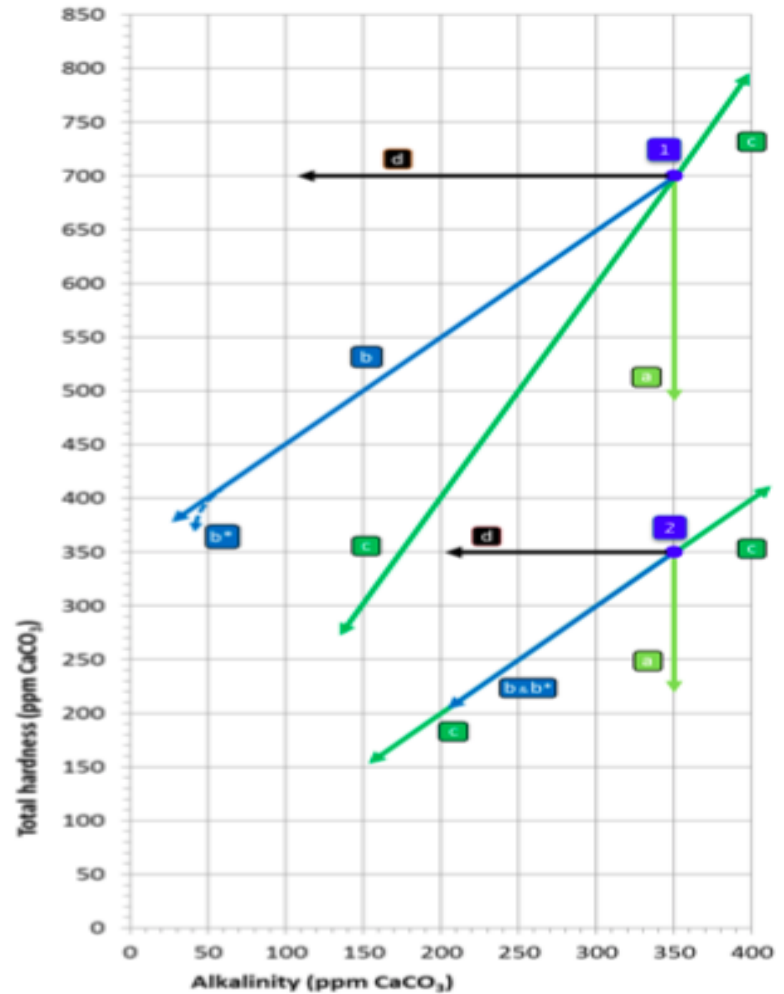


## TDS Meter

## GH and KH Meter



# The Impact of Water Treatments on Total Hardness and Alkalinity



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# What We Need?

## Epsom Salt

MgSO<sub>4</sub>, Magnesium Sulfate

## Baking Soda

NaHCO<sub>3</sub>, Sodium Bicarbonate, Magnesium Sulfate

## Distilled Water

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# References

This presentation is mostly quoted and referenced from the work of Dr. Marco Wellinger, “Water for Coffee Extraction”, Zurich University of Applied Science and [baristahustle.com](http://baristahustle.com) by Matt Perger

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**THANK YOU!**

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