

WATERS FOR PARTICULAR STYLES

Now in the following table, we are assuming that you have determined that your water is acceptable for brewing (e.g. doesn't taste like iron or smell like fish) and that you know approximately what your water is like. The best way to tell what kind of water you have is by getting a water analysis, but there are simpler ways that, for extract brewing, will do just as well. If, when you boil your water, you get a powdery white precipitate, then your water is high in carbonates. If you don't get a white precipitate after boiling, but you have hard water (soap just doesn't want to lather) your water is probably high in sulfates. Another way to tell that you have high sulfate water is if beers you make with plain tapwater (no salt additions) have a long, dry, lingering bitterness. You will have to get a water analysis to find out if your water is high in both carbonates and sulfates.

These guidelines are very general and will not produce a mineral profile that exactly imitates the water of a particular style. While it is sometimes possible to make very close approximations of some waters with very precise additions of various salts and acids, this table is meant to get the general characteristics needed to make a particular style of beer. This method also cannot account for the mineral content of various manufacturer's extracts.

"Almost Ion-Free" means water having virtually no sulfates (less than 25ppm) or carbonates (less than 50ppm). "Medium" means average levels of carbonates and sulfates (around 100 ppm of carbonates and around 50 ppm of sulfates). "High sulfate" means 100 or more ppm or so of sulfates. "High carbonate" means 175 ppm or so of carbonates.

YOUR WATER

STYLE	Almost Ion-free	Medium	High sulfate	High carbonate	High sulfate and carbonate
Pilsner (Bohemian/Czech)	A or B	B	B	B	B
Bière Blanche, Cream Ale/Lager, Dry Beer, Fruit Beer, Ice Beer, Pilsner (all except Bohemian/Czech), Tripel, Wheat (American), White, Witbier	A	A or C	C	C	C
60/-, 70/-, 80/-, 90/-, Altbier (Düsseldorf-style), Altbier (Münster-style), Barleywine, Bavarian Weizen, Belgian Ale, Belgian Golden Strong Ale, Belgian Strong Ale, Berliner Weiss, Bière de Garde, Blonde Ale/Lager, Brown Ale (American), Brown Ale (English Northern-style), California Common Beer, Continental Dark, Dark (American), Doppelbock (Helles), Dubbel, Eisbock, Export (Scottish), Flanders Brown Ale, Flanders Red Ale, Heavy (Scottish), Helles Bock, India Pale Ale (American-style), Kölsch, Light (Scottish), Mild (pale), Munich Helles, Oktoberfest/Märzen, Pale Ale (American), Rauchbier, Red Beer, Rye Beer, Saison, Smoked Beer, Steinbier, Sticke, Trappist/Abbey Ales (Other), Vienna, Weizenbock	G	A	D	E	P

	Almost Ion-free	Medium	High sulfate	High carbonate	High sulfate and carbonate
Altbier (Dortmund-style), Dortmunder/Export Bitters (all types), India Pale Ale (Traditional English-style), Old Ale	H	H	A	I	J
Black Beer, Bock (Traditional German-style), Brown Ale (English Southern-style), Doppelbock (Traditional), Dunkelweizen, Lambiek/Lambic, Mild (dark), Munich Dunkel, Porter	L	M	F	A	F
Stout (all types)	N	L	O	L	O

How to treat your water

Perform the following treatments based upon the style you are brewing and the water you have. Add the chalk *along with the extracts!* This is important because chalk will not fully dissolve in plain water, but will dissolve when added to the acidic wort in the kettle.

Note that the extract you use may have been made with high sulfate water already. If you purchase extracts intended for the style (i.e. "Bitter" or "Bohemian Pilsener," you should be safe. Overdoing the sulfate for a style that requires it isn't a big problem. Dark extracts are likely to have been made with carbonate water, so you would not want to add additional carbonate. You could check the pH at the start of the boil (it should be in the low- to mid- 5's) or you can just brew without and then see if the resulting beer is sour. If you use pale extracts and your own dark malts, then you should use the above treatments.

A - use tapwater

B - use distilled water

C - use low-ion bottled water (read the label - you want it low in sulfate and carbonate)

D - use 50% tapwater, 50% low-ion bottled water

E - aerate, boil, decant off the precipitate and add 3/4 level teaspoon of food-grade gypsum per 5 gallons

F - use low-ion bottled water and add 3 level teaspoons of food-grade chalk, along with the extracts, per 5 gallons

G - use tapwater, adding 2 level teaspoons of food-grade chalk and 1/3 level teaspoon of food-grade gypsum, along with the extracts, per 5 gallons

H - use tapwater, adding 1 level teaspoon of food-grade gypsum per 5 gallons

I - use tapwater, adding 3 level teaspoons of food-grade gypsum per 5 gallons

J - use tapwater, adding 2 level teaspoons of food-grade gypsum per 5 gallons

K - use tapwater, adding 4 level teaspoons of food-grade gypsum per 5 gallons

L - use tapwater, adding 3 level teaspoons of food-grade chalk, along with the extracts, per 5 gallons

M - use tapwater, adding 1 level teaspoon of food-grade chalk, along with the extracts, per 5 gallons

N - use tapwater, adding 5 level teaspoons of food-grade chalk, along with the extracts, per 5 gallons

O - use low-ion bottled water, adding 5 level teaspoons of food-grade chalk, along with the extracts, per 5 gallons

P - dilute tapwater 50/50 with distilled water

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