

Sierrra Nevada Pale Ale

Recipe Date: 10/13/21

Brewhouse Efficiency	85%	Style:	American Pale Ale	Ozarks Mountain Brew
Batch Size:	12.00 Gal	Method:	All Grain	Head Brewer:
Starting Boil Size:	14.73 Gal	Boil Time:	60.0 Min	Oz

Original Gravity	Final Gravity	Boil Gravity	Abv	IBU	Color	PH
1.053	1.011	1.043	5.56%	48.79	7.42°L	5.43

Fermentables	20.50 lbs	Amount	Bill	PPG	Color L	Mash Time
USA - Pale 2-Row		18.50 lb	90.2%	37	1.8°L	60.0 Min
USA - Caramel / Crystal 60L		1.50 lb	7.3%	34	60.0°L	60.0 Min
Flaked Barley		0.50 lb	2.4%	32	2.0°L	60.0 Min

Brew Steps	17.98 Gal	Temp	Description	Time
Mash Infusion	18.0 Gal	158.3 °F	Fill Hlt Heat up to Infusion temp	15.0 Min
Recirculation	9.2 Gal	155.0 °F	Add Salts and acid set valves and recirculate	75.0 Min
Mash out		172.5 °F	Raise temp to 170	15.0 Min
Fly sparge	8.8 Gal	170.0 °F	Set valves and fly sparge	60.0 Min

Hops	Amount	IBU	Type	Use	Temp	Time
Cascade	1.00 oz	7.73	Pellet	FWH		90.0 Min
Cascade	1.50 oz	19.13	Pellet	Boil		60.0 Min
Cascade	4.00 oz	18.16	Pellet	Boil		15.0 Min
Cascade	4.00 oz	3.76	Pellet	Whirlpool	170.0 °F	30.0 Min

Salts	Amount	Use	Time	Amount	Use	Time
Gypsum	10.0 g	Mash	60.0 Min			
Calc. Chloride	4.0 g	Mash	60.0 Min			
Canning/Sea Salt	4.0 g	Mash	60.0 Min			
88% Lactic Acid	6.87 ml	Mash	60.0 Min	6.5 ml	Sparge	60.0 Min

Others	Amount	Use	Description	Time
Campden tablet	1.0 Each	Strike Water	Add to strike water	5.0 Min
Whirlfloc tablet	1.0 Each	Boil	Add to boil	15.0 Min
Yeast Nutrient	1.0 Tbsp	Primary	Add to boil	5.0 Min

Yeast	Lab	ID/Name	Optimum Temp	Floculation	Attenuation	QTY
Omega Yeast Labs		OYL-071 - Lutra Kveik	68 °F to 95 °F	Medium-High	83%	2

Water	Calcium (Ca+2)	Magnesium (MG+2)	Sodium (NA+)	Chloride (CI)	Sulfate (SO4-2)	Mash PH	Sparge PH
Slightly Bitter	135.8	22.0	5.0	59.3	165.8	5.43	6.00

Notes:
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