

Ozarks Amber Lager

Beer Style: Bock		Brew Date: 12/10/18		Organization	
Brewhouse Efficiency	80%	Mash qt/lb	1.75	Ozarks Mountain Brew	
Batch Size:(kettle)	12.00	Boil Time:	60 min	Head Brewer	
Starting Boil Size:	14.04	Boil Gravity		Ozarks	

Original Gravity	Final Gravity	ABV	IBU	Color	PH
1.055	1.012	5.68%	32	16.4°L	5.36

Fermentables	Amount	Bill%	PPG	Color L	Mash Time
Vienna Malt (Wey	12.0 lbs	52%	38.0 lb	3.0 lb	60 min
Pale Ale Malt	8.0 lbs	35%	36.0 lb	3.5 lb	60 min
Caramel/Crystal Malt - 4	2.0 lbs	9%	34.0 lb	40.0 lb	60 min
Black (Patent) Malt	0.5 lbs	2%	25.0 lb	500.0 lb	60 min

Mash	Amount	Temp	Description	Defaults	Time
Infusion	10.0 Gal	152°	Recirculation	9.84 Gal	60 min
Temperature		168°	Mash out Rest	8.50 Gal	10 min
Fly sparge	10.0 Gal	168°	Slow Sparge	18.34 Gal	60 min

Hops	Amount	IBU	Type	Use	Temp	Time
Magnum	1.0 oz	19.78	Pellet	Boil	212°	60 min
Fuggles	2.0 oz	11.81	Pellet	Boil	212°	15 min
Fuggles	2.0 oz		Pellet	Boil	212°	0

Others/Salts	Amount	Use	Type	Time
Gypsum	10 g	Mash	Salt	15 min
Calc. Chloride	6 g	Mash	Salt	15 min
Phos/Lactic acid	8.19 g	Mash	Acid	15 min
Whirlfloc tablet	1 Each	Boil	Finning	15 min
Campden tablet	1 Each	Strike Water	Sterilizer	1 min
Yeast Nutrient	1 Tbs	Boil	Nutrient	15 min

Yeast	Lab	ID#	Optimum Temp	Form	Starter	Attenuation	QTY
Fermentis		Saflager W-34/70	58-60°F (9-15°C	Dry	no	83%	1

Water	Calcium	Magnesium	Sodium	Chloride	Sulfate	EA(CACO3)	Alkalinity
<i>Slightly Bitter</i>	132	7	12	100	162	-114	-212

Notes: