

Love's Eternal Pale Ale

American Pale Ale
Recipe by **DOUG WALKER**



Batch Size	Losses	Boil Time	Mash Efficiency	Mash Volume	Sparge Volume
23 L	3.79 L	30 mins	72%	23.33 L	10.72 L
OG (SG)	FG (SG)	IBU	Colour (SRM)	ABV	
1.052	1.012	35.1	4.3	5.30%	

Mash and Sparge volumes calculated using the "Grainfather-G40" profile.

Fermentables	Amount	Usage	PPG	SRM
Pale Malt (2 Row) US Supplier: Custom Fermentable	5.50 kg (84%)	Mash	36.5	2.0
White Wheat Malt Supplier: Custom Fermentable	0.50 kg (8%)	Mash	39.7	2.4
Rice Hulls Supplier: Generic	0.26 kg (4%)	Mash	0.0	0.0
Oats, Flaked Supplier: Custom Fermentable	0.26 kg (4%)	Mash	37.0	1.0
Caramel/Crystal Malt - 60L Supplier: Custom Fermentable	0.05 kg (1%)	Mash	34.2	60.0

Mash Steps	Temp	Time
Mash In	67 °C	45 min
Mash Out	75 °C	2 min

Hops	Amount	Type	Usage	Time	AA
Magnum (IBU: 13.6)	12.00 g (12%)	Pellet	Boil	30 min	14.8
Cascade (IBU: 5.6)	11.00 g (11%)	Pellet	Boil	15 min	9.3

Hops	Amount	Type	Usage	Time	AA
Centennial (IBU: 8.7)	16.00 g (16%)	Pellet	Boil	15 min	9.9
Centennial (IBU: 3.4)	23.00 g (24%)	Pellet	Hop Stand	15 min @ 82.2 °C	9.9
Citra (IBU: 3.9)	21.00 g (22%)	Pellet	Hop Stand	15 min @ 82.2 °C	13.4
Citra (IBU: 0.0)	7.09 g (7%)	Pellet	Dry Hop	10 days	13.4
Cascade (IBU: 0.0)	7.09 g (7%)	Pellet	Dry Hop	10 days	9.3

Yeast	Amount	Attenuation
American West Coast Ale Product Code: BRY-97	1 packets	76.5 %

Extras	Amount	Usage	Time
Whirlfloc	1.5 g	Mash	0 min
Fermax Yeast Nutrient	0.5 tsp	Boil	15 min
Orange Peel, Sweet	14.17 g	Boil	15 min

Water Additions	Mash	Sparge
Salt & Acid additions		
Calcium Chloride	0.027 g	0.022 g
Calcium Sulphate (Gypsum)	0.12 g	0.095 g

Fermentation Steps	Temp	Time
Start	19.1 °C	5 days

Fermentation Steps	Temp	Time
Step up	20.7 °C	4 days
Cold Crash	3.3 °C	3 days

Notes