

Apa

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	5 kg (96.2%)	80.5 %	6
Grain	Arome	0.2 kg (3.8%)	80 %	90

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Idaho 7	100 g	5 min	12.7 %
Dry Hop	Citra	50 g	2 day(s)	12 %
Dry Hop	Cascade	50 g	1 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's