

ipa

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **69**
- SRM **7.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (85.7%)	80 %	5
Grain	cookie	0.5 kg (7.1%)	70 %	49
Grain	Carared	0.5 kg (7.1%)	75 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	20 min	12.4 %
Boil	Columbus/Tomahawk/Zeus	30 g	15 min	12.4 %
Boil	Centennial	15 g	15 min	10.5 %
Boil	Ahtanum	15 g	15 min	3.4 %
Boil	Simcoe	15 g	15 min	13.2 %
Boil	Centennial	15 g	10 min	10.5 %
Boil	Ahtanum	15 g	10 min	3.4 %
Boil	Simcoe	15 g	10 min	13.2 %
Dry Hop	Simcoe	30 g	3 day(s)	13.2 %
Dry Hop	Ahtanum	30 g	3 day(s)	3.4 %
Dry Hop	Centennial	30 g	3 day(s)	10.5 %