

Colorado APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **32**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.4 liter(s)**
- Boil time **65 min**
- Evaporation rate **6 %/h**
- Boil size **22.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **22.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (95.2%)	80 %	5
Grain	Caramel/Crystal Malt - 10L	0.2 kg (4.8%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	14 g	60 min	14 %
Boil	Horizon	10 g	10 min	14 %
Boil	Ahtanum	10 g	10 min	3.9 %
Aroma (end of boil)	Ahtanum	20 g	0 min	3.9 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	10 g	0 min	14.3 %
Aroma (end of boil)	Equinox	10 g	0 min	13.4 %
Dry Hop	Columbus/Tomahawk/Zeus	20 g	5 day(s)	14.3 %
Dry Hop	Equinox	20 g	5 day(s)	13.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis