

Colorado APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **28 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (76.9%)	80 %	5
Grain	Viking Wheat Malt	0.2 kg (3.8%)	83 %	5
Grain	Pilzneński	1 kg (19.2%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Comet	20 g	60 min	8.3 %
Boil	Comet	10 g	10 min	8.3 %
Boil	Centennial	10 g	10 min	10.5 %
Boil	Centennial	20 g	1 min	10.5 %
Boil	Willamette	10 g	1 min	5 %
Boil	Ekuanot	10 g	1 min	14 %
Dry Hop	Willamette	20 g	3 day(s)	5 %
Dry Hop	Ekuanot	20 g	3 day(s)	14 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	23 g	Fermentis
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