

Colorado APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **33**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **65 min**
- Evaporation rate **6 %/h**
- Boil size **24.7 liter(s)**

Mash information

- Mash efficiency **72 %**
- 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 **5 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 **5 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (89.9%)	80 %	5
Grain	Caramel/Crystal Malt - 10L	0.2 kg (4.5%)	75 %	20
Sugar	Cukier biały	0.25 kg (5.6%)	100 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	55 min	12.8 %
Boil	Magnum	10 g	55 min	13.5 %
Boil	Chinook	10 g	5 min	13 %
Boil	Ahtanum	10 g	5 min	4 %
Aroma (end of boil)	Ahtanum	20 g	0 min	4 %
Aroma (end of boil)	Columbus	10 g	0 min	14 %
Aroma (end of boil)	Equinox	10 g	0 min	13.4 %
Dry Hop	Columbus	20 g	5 day(s)	14 %
Dry Hop	Equinox	20 g	5 day(s)	13.4 %
Dry Hop	Chinook	10 g	5 day(s)	13 %

Yeasts

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