

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 |