

ColoradoApa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **13**
- SRM **3.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **2 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **13.7 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **13.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|--------------|-------|-----|
| Grain | Colorado Pale base | 2 kg (80%) | 87 % | 5 |
| Grain | Oats, Flaked | 0.2 kg (8%) | 80 % | 2 |
| Grain | Rice, Flaked | 0.15 kg (6%) | 70 % | 2 |
| Grain | Barley, Flaked | 0.15 kg (6%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Ekuanot | 5 g | 40 min | 14 % |
| Whirlpool | Ekuanot | 5 g | 0 min | 14 % |
| Dry Hop | Ekuanot | 20 g | 3 day(s) | 14 % |