

# APA

---

- Gravity **13.3 BLG**
- ABV ---
- IBU **51**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

| Type  | Name            | Amount         | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 4.4 kg (93.6%) | 80 %  | 8   |
| Grain | Caramel pils    | 0.3 kg (6.4%)  | 75 %  | 5   |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Chinook    | 30 g   | 60 min | 10 %       |
| Boil                | Citra      | 20 g   | 15 min | 12 %       |
| Boil                | Willamette | 15 g   | 5 min  | 5 %        |
| Aroma (end of boil) | Citra      | 30 g   | 3 min  | 12 %       |
| Aroma (end of boil) | Centennial | 20 g   | 0 min  | 10.5 %     |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale  | Dry  | 11 g   | ---        |