

APA

- Gravity **11.1 BLG**
- ABV ---
- IBU **35**
- SRM **5.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **10 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **58.8 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **33.8 liter(s)** of **76C** water or to achieve **58.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|-------------|--------|-----|
| Grain | Briess - Pilsen Malt | 8 kg (80%) | 80.5 % | 2 |
| Grain | Vienna Malt | 1 kg (10%) | 78 % | 9 |
| Grain | Briess - Carapils Malt | 0.5 kg (5%) | 74 % | 2 |
| Grain | Fawcett - Pale crystal | 0.5 kg (5%) | 70 % | 85 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Citra | 25 g | 60 min | 12 % |
| Boil | Citra | 25 g | 30 min | 12 % |
| Boil | Citra | 50 g | 5 min | 12 % |
| Boil | Amarillo | 50 g | 0 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|--------|--------|------------|
| WLP001 - California Ale Yeast | Ale | Liquid | 400 ml | White Labs |