

APA (single hop CITRA)

- Gravity **12.1 BLG**
- ABV ---
- IBU **50**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **66 C**, Time **80 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|---------------|-------|-----|
| Grain | Pale Ale | 5 kg (94.3%) | 80 % | 4 |
| Grain | Karmelowy Czerwony | 0.3 kg (5.7%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|----------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |
| Boil | Citra | 10 g | 30 min | 13.5 % |
| Boil | Citra | 25 g | 15 min | 13.5 % |
| Boil | Citra | 25 g | 0 min | 13.5 % |
| Dry Hop | Citra | 40 g | 5 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |