

APA #1

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 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 **63 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (94.3%) | 81 % | 2.5 |
| Grain | Briess - Caracrytal Wheat Malt | 0.3 kg (5.7%) | 78 % | 108 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil | Loral | 13 g | 60 min | 23.2 % |
| Aroma (end of boil) | Citra | 90 g | 0 min | 11.6 % |
| Dry Hop | Citra | 90 g | 4 day(s) | 11.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |