

APA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **23**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Pilzneński | 4.8 kg (76.2%) | 81 % | 4 |
| Grain | Pszeniczny | 1 kg (15.9%) | 85 % | 4 |
| Grain | Briess - Carapils Malt | 0.5 kg (7.9%) | 74 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Mosaic | 15 g | 15 min | 12.3 % |
| Boil | Chinook | 15 g | 15 min | 11.7 % |
| Dry Hop | Citra | 20 g | 4 day(s) | 12 % |
| Whirlpool | Kohatu | 15 g | 30 min | 5.8 % |
| Boil | Citra | 5 g | 60 min | 12.9 % |