

apa 23.02.2024r

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **59**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 1 kg (24.4%) | 80 % | 8 |
| Grain | Pilzneński | 1.3 kg (31.7%) | 81 % | 4 |
| Grain | Monachijski | 0.6 kg (14.6%) | 80 % | 16 |
| Grain | Pszeniczny | 0.8 kg (19.5%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (9.8%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Citra | 25 g | 60 min | 12 % |
| Boil | Citra | 25 g | 1 min | 12 % |
| Boil | Cascade | 50 g | 1 min | 6 % |
| Boil | Amarillo | 30 g | 15 min | 9.5 % |
| Boil | Citra | 10 g | 15 min | 12 % |