

Apa ciasteczko

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **18**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **65 C**, Time **120 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **120 min** at **65C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (95.2%) | 80 % | 7 |
| Grain | Coockie | 0.25 kg (4.8%) | 80 % | 40 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Magnum | 15 g | 90 min | 11.5 % |
| Dry Hop | Marynka | 10 g | 7 day(s) | 8.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |