

Jakaś APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **3.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|-------------|-------|-----|
| Grain | Pilzneński | 5 kg (100%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------|--------|----------|------------|
| Boil | Magnum | 15 g | 40 min | 12.7 % |
| Boil | Sorachi Ace | 30 g | 5 min | 8 % |
| Whirlpool | Citra | 30 g | 10 min | 13.2 % |
| Whirlpool | Mosaic | 30 g | 10 min | 12.3 % |
| Dry Hop | Citra | 40 g | 5 day(s) | 13.2 % |
| Dry Hop | Mosaic | 40 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 100 ml | Fermentis |