

Resztkowe

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **35**
- SRM **4.4**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 4 kg (90.9%) | 80 % | 7 |
| Grain | Płatki owsiane | 0.4 kg (9.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|---------|--------|----------|------------|
| First Wort | Chinook | 20 g | 60 min | 13 % |
| Whirlpool | Simcoe | 25 g | 1 min | 13.2 % |
| Whirlpool | Mosaic | 25 g | 1 min | 10 % |
| Dry Hop | Citra | 20 g | 4 day(s) | 12 % |
| Whirlpool | Chinook | 40 g | 1 min | 13 % |
| Dry Hop | Mosaic | 25 g | 4 day(s) | 10 % |
| Dry Hop | Simcoe | 25 g | 4 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |