

Otwarcie 2.0

- Gravity **12.6 BLG**
- ABV ---
- IBU **51**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **34.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **22.3 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **16.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|------------------|-------|-----|
| Grain | Pilzneński | 5 kg (89.9%) | 81 % | 4 |
| Grain | carabelge | 0.375 kg (6.7%) | 74 % | 32 |
| Grain | Pszeniczny | 0.1875 kg (3.4%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|-----------|------------|
| Boil | Mosaic | 25 g | 60 min | 10 % |
| Boil | Mosaic | 25 g | 30 min | 10 % |
| Aroma (end of boil) | Mosaic | 25 g | 15 min | 10 % |
| Whirlpool | Mosaic | 50 g | 0 min | 10 % |
| Dry Hop | Mosaic | 50 g | 14 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |