

AS lvl 2

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **47**
- SRM **28.3**
- Style **American Stout**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **66 C**, Time **10 min**
- Temp **69 C**, Time **10 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **10 min** at **66C**
- Keep mash **10 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (61.5%) | 80 % | 5 |
| Grain | Monachijski | 1 kg (13.7%) | 80 % | 16 |
| Grain | Słód owsiany Fawcett | 0.5 kg (6.8%) | 61 % | 5 |
| Grain | Fawcett - Brown | 0.07 kg (1%) | 72 % | 180 |
| Grain | Jęczmień palony | 0.25 kg (3.4%) | 55 % | 985 |
| Grain | Fawcett - Pale Chocolate | 0.3 kg (4.1%) | 71 % | 600 |
| Grain | Karmelowy żytni Strzegom | 0.3 kg (4.1%) | 75 % | 150 |
| Grain | Płatki pszeniczne | 0.4 kg (5.5%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | lunga | 15 g | 45 min | 11 % |
| Boil | Simcoe | 30 g | 25 min | 13.2 % |

| | | | | |
|-----------|--------------|------|-------|--------|
| Boil | Enigma (AUS) | 15 g | 5 min | 17.2 % |
| Whirlpool | Enigma (AUS) | 15 g | --- | 17.2 % |
| Boil | Idaho 7 | 15 g | 5 min | 12.7 % |
| Whirlpool | Idaho 7 | 15 g | --- | 12.7 % |

Notes

- Na zimno 20g simcoe idaho i enigma
37l wody 10g kredy 2g sody oczyszczonej 2g gipsu piwowarskiego
Ca+2
Mg+2
SO4-2
Na+
Cl-
HCO3-
Jun 8, 2021, 7:23 AM