

XXX

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **38**
- SRM **4.1**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg (52.2%)	85 %	4
Grain	Viking Pale Ale malt	2 kg (34.8%)	80 %	5
Grain	Acid Malt	0.5 kg (8.7%)	58.7 %	6
Grain	Płatki owsiane	0.25 kg (4.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	15 g	30 min	4.3 %
Boil	Oktawia	15 g	30 min	7.1 %
Boil	Oktawia	65 g	15 min	7.1 %
Boil	Puławski	15 g	15 min	4.3 %
Boil	Oktawia	30 g	0 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	1 g	Fermentis