

#siedzedomu

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **29**
- SRM **5.9**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (71.4%)	82 %	4
Grain	Rye Malt	0.2 kg (4.8%)	63 %	10
Grain	Strzegom Monachijski typ I	0.5 kg (11.9%)	79 %	16
Grain	Karmelowy Czerwony	0.5 kg (11.9%)	75 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook PL	20 g	60 min	8.5 %
Boil	Cascade PL	20 g	2 min	5.5 %
Aroma (end of boil)	Citra	10 g	1 min	12 %
Boil	Chinook PL	10 g	20 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale