

To som siurki

- Gravity **6.1 BLG**
- ABV **2.3 %**
- IBU **33**
- SRM **3.1**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **70 C**, Time **60 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **21.5 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (60.6%)	82 %	6
Grain	Żytni	1 kg (30.3%)	85 %	6
Grain	Strzegom Karmel 30	0.3 kg (9.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	24 g	30 min	13.5 %
Boil	Mandarina Bavaria	15 g	15 min	10 %
Boil	Mandarina Bavaria	15 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP351 - Bavarian Weizen Yeast	Wheat	Liquid	150 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	chlorek wapnia	5 g	Boil	60 min