Żytnie

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **55**
- SRM **5.2**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg *(66.7%)*	80 %	5
Grain	Żytni	2 kg *(33.3%)*	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	38 g	60 min	11.3 %
Whirlpool	Izabella	70 g	20 min	5.8 %
Dry Hop	Izabella	30 g	2 day(s)	5.8 %
Dry Hop	Lublin (Lubelski)	100 g	2 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	150 ml	fermentis