

Żytniak

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **27**
- SRM **4.3**
- Style **American Wheat or Rye Beer**

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 **39.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **73C**
- Sparge using **25.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2 kg (28.6%)	85 %	8
Grain	Strzegom Pale Ale	4 kg (57.1%)	79 %	6
Grain	Cara-Pils/Dextrine	0.5 kg (7.1%)	72 %	4
Grain	Płatki owsiane	0.5 kg (7.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	50 min	12 %
Boil	Citra	15 g	30 min	12 %
Boil	Citra	15 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	9 g	Fermentis