

Żytko

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **51**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **24.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (72.3%)	80 %	5
Grain	Żytńi	2 kg (24.1%)	85 %	8
Grain	Carared	0.3 kg (3.6%)	75 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Angus	25 g	60 min	13.9 %
Aroma (end of boil)	Amarillo	60 g	10 min	9.5 %
Aroma (end of boil)	Citra	30 g	10 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---