

## żytnia aipa

- Gravity **14.7 BLG**
- ABV ---
- IBU **70**
- SRM **8.8**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.6 kg (65.5%)	80 %	5
Grain	Żytni	1.5 kg (27.3%)	85 %	8
Grain	caramel munich bestmaltz	0.4 kg (7.3%)	80 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	30 g	60 min	9.5 %
Boil	Citra	30 g	30 min	12 %
Boil	Cascade	30 g	10 min	6 %
Boil	Citra	30 g	5 min	12 %
Dry Hop	Citra	38 g	4 day(s)	12 %
Dry Hop	Cascade	40 g	4 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Slant	150 ml	---
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