

## # 171 Żytnia ipa

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **61**
- SRM **6.2**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **15 %**
- Size with trub loss **18.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

### Steps

- Temp **66 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	4.2 kg (68.3%)	80.5 %	2
Grain	Briess - Rye Malt	1.5 kg (24.4%)	80 %	7
Grain	płatki jęczmienne	0.3 kg (4.9%)	60 %	4
Grain	Weyermann Caramunich 3	0.15 kg (2.4%)	76 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Simcoe	20 g	10 min	13.2 %
Boil	Simcoe	30 g	30 min	13.2 %
Boil	Azacca	50 g	10 min	14 %
Dry Hop	El Dorado	90 g	5 day(s)	15 %
Dry Hop	Citra	50 g	5 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	22 g	Lallemand

## Notes

- caramunich na wygrzew dla nadania koloru  
*Dec 16, 2023, 7:16 AM*