

## żytni rys

- Gravity **25.3 BLG**
- ABV **11.8 %**
- IBU **80**
- SRM **57**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **15 %/h**
- Boil size **21.4 liter(s)**

### Mash information

- Mash efficiency **62 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **32.2 liter(s)**
- Total mash volume **41.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **32.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **-1.6 liter(s)** of **76C** water or to achieve **21.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2 kg (21.7%)	85 %	8
Grain	Viking Pale Ale malt	4 kg (43.5%)	80 %	5
Grain	Monachijski	1 kg (10.9%)	80 %	16
Grain	żyto prażone	1 kg (10.9%)	55 %	1000
Grain	Płatki żytnie	0.8 kg (8.7%)	85 %	3
Grain	Płatki owsiane	0.4 kg (4.3%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %
Boil	Puławski	11 g	60 min	7.2 %
Boil	Sybilla	34 g	60 min	6.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Slant	600 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Spice	płatki dębowe	15 g	Secondary	30 day(s)
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