

Izabella Polski Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **69 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (75.5%)	81 %	4
Grain	Monachijski	1 kg (18.9%)	80 %	16
Grain	Viking carabody	0.3 kg (5.7%)	78 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	25 g	30 min	5 %
Boil	Izabella	35 g	10 min	5 %
Whirlpool	Izabella	40 g	15 min	5 %
Dry Hop	Izabella	100 g	3 day(s)	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP 90 sandiego super yeast	Ale	Slant	300 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Flavor	NaCl	7 g	Mash	70 min

Fining	Whirfloc	4 g	Boil	5 min
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