

## Własnymi siłami [Polish IPA]

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **31**
- SRM **7.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (90.9%)	79 %	6
Grain	Strzegom Bursztynowy	0.5 kg (9.1%)	70 %	49

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Izabella	30 g	90 min	6.8 %
Aroma (end of boil)	Izabella	30 g	0 min	5.1 %
Whirlpool	Izabella	40 g	0 min	5.1 %
Dry Hop	Zula	50 g	2 day(s)	9.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale