

## nie znam się

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- Gravity **14 BLG**
- ABV ---
- IBU **41**
- SRM **14.4**
- Style **Red IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

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

### Mash step by step

- Heat up **18.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (76.2%)	80 %	4
Grain	Weyermann - Carafa I	0.05 kg (1%)	70 %	690
Grain	Cara Ruby Castle	0.5 kg (9.5%)	72 %	49
Grain	Karmelowy Czerwony	0.5 kg (9.5%)	75 %	59
Grain	Carahell	0.1 kg (1.9%)	77 %	26
Grain	Weyermann - Melanoiden Malt	0.1 kg (1.9%)	81 %	53

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Aroma (end of boil)	Cascade	15 g	10 min	6 %
Boil	Chinook	5 g	30 min	13 %
Aroma (end of boil)	Cascade	5 g	15 min	6 %

### Yeasts

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