

## Rowerowe 3/21

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **13**
- SRM **4.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **20.7 liter(s)**

### Steps

- Temp **72 C**, Time **60 min**

### Mash step by step

- Heat up **17.3 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **22 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2.5 kg (72.5%)	80 %	7
Grain	Carabelge	0.15 kg (4.3%)	80 %	30
Grain	Briess - Rye Malt	0.5 kg (14.5%)	80 %	7
Grain	Płatki owsiane	0.3 kg (8.7%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	30 min	7.2 %
Boil	Cascade	25 g	1 min	7.2 %

### Yeasts

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