

Owies Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **30**
- SRM **6.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **32.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	2 kg (30.8%)	80 %	5
Grain	Płatki owsiane	1 kg (15.4%)	60 %	3
Grain	Monachijski	3 kg (46.2%)	80 %	16
Grain	Karmelowy 30	0.5 kg (7.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	60 min	13.2 %
Aroma (end of boil)	Citra	25 g	1 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---