

## Roggenbier (pieron)

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **15**
- SRM **5.6**
- Style **Roggenbier**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **34 liter(s)**
- Total mash volume **43.7 liter(s)**

### Steps

- Temp **45 C**, Time **20 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **70 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **34 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **70 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **48.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	4 kg (41.2%)	85 %	8
Grain	Malteurop MepAle (Pale Ale)	3 kg (30.9%)	85 %	5
Grain	Viking - Monachijski typ I	2 kg (20.6%)	79 %	16
Grain	castle crystal	0.15 kg (1.5%)	78 %	20
Grain	zakwaszający	0.15 kg (1.5%)	75 %	---
Grain	Płatki owsiane	0.4 kg (4.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	50 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Mauribrew Weiss Y1433	Wheat	Slant	1000 ml	Mauribrew
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min
Other	łuska ryżowa	500 g	Mash	60 min