

# ROGGENBIER

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **20**
- SRM **11.7**
- Style **Roggenbier**

## 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 **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **40 C**, Time **20 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **42.9C**
- Add grains
- Keep mash **20 min** at **40C**
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Rye Malt	3.3 kg (50.8%)	82 %	8
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (15.4%)	80 %	25
Grain	Viking Pilsner malt	1.7 kg (26.2%)	82 %	4
Grain	Słód Caramunich Typ II Weyermann	0.4 kg (6.2%)	73 %	120
Grain	Weyermann - Carafa I	0.1 kg (1.5%)	70 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	18 g	60 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	5 ml	Fermentum Mobile