

# Roggenbier

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **16**
- SRM **6.3**
- 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 **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **1 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	3.5 kg (63.6%)	85 %	8
Grain	Monachijski	1 kg (18.2%)	80 %	16
Grain	Pilzneński	0.75 kg (13.6%)	81 %	4
Grain	Caramunich® typ I	0.25 kg (4.5%)	73 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	30 g	60 min	4.7 %
Boil	Hallertau	20 g	15 min	4.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Weiss Y1433	Wheat	Dry	11 g	Mauribrew