

# Roggenbier

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **16**
- SRM **13.2**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.4 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **31.2 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**

## Mash step by step

- Heat up **23.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	3.5 kg (44.9%)	85 %	8
Grain	Monachijski	1.9 kg (24.4%)	80 %	16
Grain	Pilzneński	1.7 kg (21.8%)	81 %	4
Grain	Caramunich® typ I	0.6 kg (7.7%)	73 %	80
Grain	Jęczmień palony	0.1 kg (1.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	40 g	60 min	4 %
Boil	Tettnang	10 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	119.05 ml	Fermentum Mobile