

# Roggenbier

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **21**
- SRM **5.5**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **12.2 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **9.5 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **63C**
- Keep mash **1 min** at **76C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1.5 kg (55.6%)	85 %	8
Grain	Pszeniczny	0.25 kg (9.3%)	85 %	4
Grain	Strzegom Monachijski typ I	0.75 kg (27.8%)	79 %	16
Grain	Oats, Flaked	0.2 kg (7.4%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	hallertauer mittelfrueh	20 g	60 min	4.8 %
Aroma (end of boil)	hallertauer mittelfrueh	5 g	15 min	4.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	100 ml	Fermentum Mobile

## Notes

- Fermentacja 16-18st 4 dni, potem luzem do 20st

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

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