

# Roggenbier Żytnie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **13**
- SRM **10**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.1 liter(s)**

## Steps

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

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2.2 kg (46.8%)	85 %	8
Grain	Strzegom Monachijski typ II	2.2 kg (46.8%)	79 %	22
Grain	Karmelowy żytni Strzegom	0.3 kg (6.4%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	30 g	60 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wb-06	Wheat	Slant	200 ml	---