

# Roggenbier

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **18**
- SRM **7.4**
- 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 **13 %/h**
- Boil size **26.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **29.6 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **23.9 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **26.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Žytni	3 kg (52.6%)	85 %	8
Grain	Pilzneński	1.4 kg (24.6%)	81 %	4
Grain	Monachijski	1 kg (17.5%)	80 %	16
Grain	Caramunich® typ I	0.3 kg (5.3%)	73 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	25 g	60 min	6.8 %
Aroma (end of boil)	Izabella	25 g	0 min	6.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Westfriedhof - Hefeweizen (YS101)	Wheat	Liquid	1000 ml	Yeast Side Labs
Starter				