

# Rogger

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **14**
- SRM **7.2**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **32.1 liter(s)**

## Steps

- Temp **45 C**, Time **0 min**
- Temp **55 C**, Time **15 min**
- Temp **63.5 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **25.8 liter(s)** of strike water to **48.1C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **15 min** at **55C**
- Keep mash **60 min** at **63.5C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	4 kg (63.5%)	85 %	8
Grain	pilzenski	1 kg (15.9%)	80.5 %	2
Grain	Strzegom Monachijski typ I	1 kg (15.9%)	79 %	16
Grain	Caramunich® typ I	0.1 kg (1.6%)	73 %	80
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (3.2%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	10 g	80 min	7.1 %
Boil	Hallertau Tradition	15 g	15 min	7.1 %
Boil	Hallertau Tradition	25 g	5 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Mauribrew Weiss Y1433	Wheat	Dry	12.5 g	Mauribrew
--------------------------	-------	-----	--------	-----------