

# Roggenbier z homebeer zmodyfikowane

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **13.2**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.1 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **8.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **12.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1 kg (39.2%)	85 %	8
Grain	Strzegom Pilzneński	0.8 kg (31.4%)	80 %	4
Grain	Strzegom Monachijski typ II	0.4 kg (15.7%)	79 %	22
Grain	Strzegom Karmel 300	0.1 kg (3.9%)	70 %	299
Grain	Strzegom Karmel 600	0.05 kg (2%)	68 %	601
Grain	Pszeniczny	0.2 kg (7.8%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	5 g	60 min	6.5 %
Boil	perle	10 g	10 min	6.5 %
Boil	perle	10 g	5 min	6.5 %