

ES Roggenbier

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **15**
- SRM **12.8**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **22.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **14.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **1 min** at **77C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **22.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.2 kg (44.5%)	79 %	6
Grain	Żytni	2 kg (40.5%)	85 %	8
Grain	Monachijski	0.5 kg (10.1%)	80 %	16
Grain	Strzegom Karmel 300	0.2 kg (4%)	70 %	299
Grain	Barwiący	0.04 kg (0.8%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	11.5 g	Safbrew