

Roger

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **16**
- SRM **15.7**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **0 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

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

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2.7 kg (45.4%)	85 %	8
Grain	Strzegom Monachijski typ I	1.49 kg (25%)	79 %	16
Grain	Viking Pale Ale malt	1.35 kg (22.7%)	80 %	5
Grain	Caraaroma	0.27 kg (4.5%)	78 %	400
Grain	Weyermann - Carafa I	0.14 kg (2.4%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	13.5 g	10 min	4 %
Boil	lunga	15 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	14.85 g	Safbrew