

Rauch Roggen

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **20**
- SRM **7.5**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	2 kg (51.3%)	82 %	10
Grain	Żytni	1.5 kg (38.5%)	85 %	8
Grain	Viking Cookie	0.4 kg (10.3%)	72 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	300 ml	Fermentum Mobile