

Roggenbier

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **16**
- SRM **7.8**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **49 C**, Time **15 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **53.8C**
- Add grains
- Keep mash **15 min** at **49C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (37.4%)	82 %	4
Grain	Viking Munich Malt	1 kg (18.7%)	78 %	18
Grain	Rye Malt	2 kg (37.4%)	63 %	10
Grain	Caramunich® typ I	0.35 kg (6.5%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	25 g	60 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Slant	100 ml	Safbrew