

Coś jak...Roggenbier

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **21**
- SRM **12**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**
- Temp **52 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	2 kg (44.4%)	85 %	8
Grain	Pilznieński	1 kg (22.2%)	81 %	4
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (11.1%)	79 %	130
Grain	Strzegom Pale Ale	0.5 kg (11.1%)	79 %	6
Grain	Karmelowy żytni Strzegom	0.5 kg (11.1%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	10 g	20 min	14.6 %
Boil	Ella (AUS)	15 g	10 min	14.6 %
Whirlpool	Ella (AUS)	20 g	5 min	14.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis