

# Wizē be ruggis

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **20**
- SRM **9.4**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.8 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **8.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód orkiszowy	1.19 kg (40.5%)	82 %	5
Grain	Strzegom Pilzneński	1.05 kg (35.7%)	80 %	4
Grain	Żytni	0.56 kg (19%)	85 %	8
Grain	Caraaroma	0.14 kg (4.8%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	8.8 %
Boil	Lublin (Lubelski)	20 g	10 min	4.4 %

## Notes

- drozdze litewskie z fm  
*Jul 2, 2020, 7:49 AM*