

## Rog II

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **15**
- SRM **19.8**
- Style **Roggenbier**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **10 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1 kg (35.1%)	85 %	8
Grain	Strzegom Monachijski typ I	0.5 kg (17.5%)	79 %	16
Grain	Strzegom Pilzneński	1 kg (35.1%)	80 %	4
Grain	Caraaroma	0.25 kg (8.8%)	78 %	400
Grain	Carafa	0.1 kg (3.5%)	70 %	664

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	5 g	60 min	11 %
Boil	Saaz (Czech Republic)	10 g	15 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	5 g	2 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	10 ml	Fermentum Mobile