

## 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 |