

# Roggenbier

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **18**
- SRM **17.7**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **70 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

## Fermentables

| Type  | Name        | Amount          | Yield | EBC  |
|-------|-------------|-----------------|-------|------|
| Grain | Żytni       | 2.75 kg (51%)   | 85 %  | 8    |
| Grain | Monachijski | 1.25 kg (23.2%) | 80 %  | 16   |
| Grain | Pilzneński  | 1 kg (18.5%)    | 81 %  | 4    |
| Grain | Caraaroma   | 0.25 kg (4.6%)  | 78 %  | 400  |
| Grain | Carafa III  | 0.145 kg (2.7%) | 70 %  | 1034 |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | East Kent Goldings | 30 g   | 60 min | 5.1 %      |
| Boil    | Lublin (Lubelski)  | 15 g   | 10 min | 4 %        |

## Yeasts

| Name                   | Type  | Form   | Amount | Laboratory       |
|------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 30 ml  | Fermentum Mobile |