

# Roggenbier z homebeer zmodyfikowane

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **13.2**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.1 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.5 liter(s)**

## Steps

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

## Mash step by step

- Heat up **8.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **12.1 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Żytni                       | 1 kg (39.2%)   | 85 %  | 8   |
| Grain | Strzegom Pilzneński         | 0.8 kg (31.4%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ II | 0.4 kg (15.7%) | 79 %  | 22  |
| Grain | Strzegom Karmel 300         | 0.1 kg (3.9%)  | 70 %  | 299 |
| Grain | Strzegom Karmel 600         | 0.05 kg (2%)   | 68 %  | 601 |
| Grain | Pszeniczny                  | 0.2 kg (7.8%)  | 85 %  | 4   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Perle | 5 g    | 60 min | 6.5 %      |
| Boil    | perle | 10 g   | 10 min | 6.5 %      |
| Boil    | perle | 10 g   | 5 min  | 6.5 %      |