

# Polish Imperial Roggenbier

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **42**
- SRM **5.8**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **63C**
- Keep mash **1 min** at **76C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Żytni                      | 3 kg (55.6%)  | 85 %  | 8   |
| Grain | Pszeniczny                 | 1 kg (18.5%)  | 85 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (18.5%)  | 79 %  | 16  |
| Grain | Oats, Flaked               | 0.4 kg (7.4%) | 80 %  | 2   |

## Hops

| Use for    | Name        | Amount | Time   | Alpha acid |
|------------|-------------|--------|--------|------------|
| First Wort | Amora Preta | 20 g   | 60 min | 11.2 %     |
| Boil       | Amora Preta | 20 g   | 30 min | 11.2 %     |
| Whirlpool  | Amora Preta | 60 g   | 1 min  | 11.2 %     |

## Yeasts

| Name                   | Type  | Form  | Amount | Laboratory       |
|------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 100 ml | Fermentum Mobile |