

# 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