

ROGGENBIER - receptura D. Chrapek

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **14**
- SRM **7.4**
- 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 **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **0 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **79C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------------|-----------------|--------|-----|
| Grain | Żytni | 3.5 kg (63.6%) | 85 % | 8 |
| Grain | Monachijski - Słodownia Optima | 1 kg (18.2%) | 78.9 % | 18 |
| Grain | Pilzneński Jasny - Słodownia Optima | 0.75 kg (13.6%) | 82.6 % | 3 |
| Grain | Caramunich® typ I | 0.25 kg (4.5%) | 73 % | 80 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Hallertauer Mittelfruh | 30 g | 60 min | 3.5 % |
| Boil | Hallertauer Mittelfruh | 10 g | 45 min | 3.5 % |

Yeasts

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