

żytnia

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **19**
- SRM **14.9**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **18.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **18.7 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **18.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|-------|------|
| Grain | Żytni | 2.1 kg (50.5%) | 85 % | 8 |
| Grain | Strzegom Monachijski typ II | 2 kg (48.1%) | 79 % | 22 |
| Grain | Carafa special III 1300-1500 | 0.06 kg (1.4%) | 70 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 20 g | 60 min | 6.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 200 ml | Fermentum Mobile |