

Roggenbier (pieron)

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **15**
- SRM **5.6**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **34 liter(s)**
- Total mash volume **43.7 liter(s)**

Steps

- Temp **45 C**, Time **20 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **70 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **34 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **70 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **48.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Żytni | 4 kg (41.2%) | 85 % | 8 |
| Grain | Malteurop MepAle (Pale Ale) | 3 kg (30.9%) | 85 % | 5 |
| Grain | Viking - Monachijski typ I | 2 kg (20.6%) | 79 % | 16 |
| Grain | castle crystal | 0.15 kg (1.5%) | 78 % | 20 |
| Grain | zakwaszający | 0.15 kg (1.5%) | 75 % | --- |
| Grain | Płatki owsiane | 0.4 kg (4.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 50 g | 50 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------------------|-------|-------|---------|-----------|
| Mauribrew Weiss Y1433 | Wheat | Slant | 1000 ml | Mauribrew |
|--------------------------|-------|-------|---------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 10 min |
| Other | łuska ryżowa | 500 g | Mash | 60 min |