

6.Roggenbier

- Gravity **12.9 BLG**
- ABV ---
- IBU **20**
- SRM **13.1**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **30 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **46 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 **18.4 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **20 min** at **46C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **79C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Best Vienna | 2.5 kg (40.7%) | 80.5 % | 8 |
| Grain | Żytni | 1 kg (16.3%) | 85 % | 8 |
| Grain | Honey Malt | 1 kg (16.3%) | 80 % | 49 |
| Grain | Casle Malting Whisky Nature | 0.5 kg (8.1%) | 85 % | 4 |
| Grain | Roastd rye | 0.1 kg (1.6%) | 80 % | 800 |
| Grain | BESTMALZ - Best Heidelberg Wheat Malt | 0.5 kg (8.1%) | 82 % | 3 |
| Grain | Oats, Flaked | 0.55 kg (8.9%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 18 g | 55 min | 3.2 % |
| Boil | junga | 10 g | 30 min | 11.1 % |
| Aroma (end of boil) | junga | 10 g | 10 min | 11.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Safbrew WB-06 | Wheat | Dry | 11 g | Safbrew |