

Roggenbier

- Gravity **12.9 BLG**
- ABV ---
- IBU **24**
- SRM **12.9**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|------------------|-------|-----|
| Grain | Weyermann - Rye Malt | 1.6 kg (50%) | 85 % | 8 |
| Grain | Weyermann - Pilsner Malt | 0.8 kg (25%) | 81 % | 5 |
| Grain | Weyermann - Munich II | 0.666 kg (20.8%) | 78 % | 22 |
| Grain | Weyermann - Caramunich II | 0.133 kg (4.2%) | 76 % | 236 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Hallertau Spalt Select | 20 g | 60 min | 3.4 % |
| Boil | Hallertau Spalt Select | 25 g | 30 min | 3.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Safbrew WB-06 | Wheat | Dry | 6 g | Safbrew |