

Rye Bread Ale #2

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **32**
- SRM **5.9**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

Steps

- Temp **65 C**, Time **75 min**

Mash step by step

- Heat up **16.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 1.5 kg (27.5%) | 85 % | 7 |
| Grain | Weyermann - Pilsner Malt | 2 kg (36.7%) | 81 % | 5 |
| Grain | Chleb żytni | 1.5 kg (27.5%) | 70 % | 7 |
| Grain | Melanoiden Malt | 0.25 kg (4.6%) | 80 % | 39 |
| Grain | Caraamber | 0.2 kg (3.7%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | El Dorado | 30 g | 60 min | 11 % |
| Aroma (end of boil) | Hersbrucker | 75 g | 0 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|-------------|
| Wyeast - 1028 London Ale | Ale | Liquid | 200 ml | Wyeast Labs |