

Grodzisz #2

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **33**
- SRM **4.5**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **1 %**
- Size with trub loss **31.2 liter(s)**
- Boil time **45 min**
- Evaporation rate **8 %/h**
- Boil size **36.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **27.3 liter(s)** of **76C** water or to achieve **36.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Smoked Malt | 1.5 kg (33.3%) | 80 % | 18 |
| Grain | Weyermann - Smoked Malt | 1.5 kg (33.3%) | 81 % | 6 |
| Grain | Rye Malt | 1 kg (22.2%) | 63 % | 10 |
| Grain | Viking Pilsner malt | 0.5 kg (11.1%) | 82 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Vanguard | 15 g | 45 min | 7.7 % |
| Boil | Simcoe (US) | 15 g | 25 min | 14.5 % |
| Aroma (end of boil) | Simcoe (US) | 15 g | 5 min | 14.5 % |
| Whirlpool | Simcoe (US) | 15 g | 20 min | 14.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|-------|--------|------------|
| WLP001 - California Ale Yeast | Ale | Slant | 200 ml | White Labs |