

Grodziskie full smoked

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **15**
- SRM **2.4**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **64 C**, Time **35 min**
- Temp **68 C**, Time **20 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **35 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **15 min** at **76C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|--------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2 kg (66.7%) | 80 % | 3 |
| Grain | Słód Wędzony Steinbach | 1 kg (33.3%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Lomik | 20 g | 60 min | 3.8 % |
| Boil | Lomik | 10 g | 30 min | 3.8 % |
| Boil | Lomik | 20 g | 5 min | 3.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11 g | Safbrew |