

## grodzisz 2.0

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- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **16**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

### 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 **10 %/h**
- Boil size **16.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

### Steps

- Temp **38 C**, Time **45 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **6 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **45 min** at **38C**
- Keep mash **15 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2 kg (100%)	80 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	5 g	60 min	13.5 %
Boil	Saaz (Czech Republic)	10 g	10 min	3.21 %
Boil	Saaz (Czech Republic)	10 g	0 min	3.21 %

### Notes

- 38\* (3 L wody) -> 45 minut
  - 63\* (1,5 L wody) -> 15 minut
  - 72 \* (1,5L wody) -> 30 minut
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