

Happy Grodzisk #2

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **27**
- SRM **2.3**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **7.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **9.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **3.9 liter(s)**
- Total mash volume **5 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **3.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **9.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|---------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 1.1 kg (100%) | 80 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Marynka | 4 g | 60 min | 8.5 % |
| Boil | Citra | 9 g | 5 min | 13.3 % |
| Boil | Amarillo | 9 g | 5 min | 8.3 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |
| Dry Hop | Galaxy | 15 g | 3 day(s) | 15 % |