

## #21 Gdanski Grodzisz v 2

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- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **27**
- SRM **3.5**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **48 liter(s)**
- Trub loss **5 %**
- Size with trub loss **50.4 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **62.1 liter(s)**

### Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

### Steps

- Temp **40 C**, Time **50 min**
- Temp **51 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **24.5 liter(s)** of strike water to **42.9C**
- Add grains
- Keep mash **50 min** at **40C**
- Keep mash **20 min** at **51C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **44.6 liter(s)** of **76C** water or to achieve **62.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	5 kg (71.4%)	83 %	8
Grain	Viking Wheat Malt	1 kg (14.3%)	83 %	5
Grain	Viking Pale Ale malt	1 kg (14.3%)	83 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	25 g	60 min	15 %
Boil	Galaxy	10 g	20 min	15 %
Aroma (end of boil)	Galaxy	15 g	5 min	15 %
Dry Hop	Amarillo	50 g	3 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	Safbrew

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	karuk	20 g	Secondary	5 day(s)