

## #153 Grodziskie

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **22**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **3 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **67 min**
- Evaporation rate **14 %/h**
- Boil size **20.9 liter(s)**

### Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **19.6 liter(s)**

### Steps

- Temp **67 C**, Time **37 min**
- Temp **72 C**, Time **25 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **16.8 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **37 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **20.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2 kg (71.4%)	80 %	3
Grain	Weyermann - Carapils	0.3 kg (10.7%)	78 %	4
Grain	Płatki owsiane	0.25 kg (8.9%)	85 %	3
Grain	Diastatyczny	0.25 kg (8.9%)	78 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga PL	7 g	55 min	9.2 %
Boil	lunga PL	7 g	30 min	9.2 %
Aroma (end of boil)	lunga PL	10 g	6 min	9.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Slant	100 ml	Fermentum Mobile

### 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	Whirlfloc	1.25 g	Boil	12 min