

## LEM | Grodziskie (by Homebeer)

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **10**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **7.5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.56 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **46 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **30 C**, Time **63 min**
- Temp **10 C**, Time **73 min**
- Temp **79 C**, Time **0 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **8.6C**
- Add grains
- Keep mash **73 min** at **10C**
- Keep mash **63 min** at **30C**
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **53C**
- Keep mash **0 min** at **79C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2.8 kg (66.7%)	80 %	3
Grain	Viking Pilsner malt	1.4 kg (33.3%)	82 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	15 g	55 min	4 %
Boil	Lublin (Lubelski)	10 g	25 min	4 %
Boil	Lublin (Lubelski)	5 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Safbrew

### Notes

- Dodanie słodów do 15L wody o temp. 49C.  
Zacieranie w temperaturze 46C - 10min  
Podniesienie temperatury do 53C - 15 min.  
Podniesienie temperatury do 63C - 30 min.  
Podniesienie temperatury do 73C - 10 min.  
Podniesienie temperatury do 78-80C - maschout.  
Filtracja i wysładzanie w 10L o temp. 75C.

Fermentacja burzliwa 5-7 dni w temp. 18-20C.

Rozlew 4g glukozy na 0.5L.

*Jun 20, 2019, 1:09 PM*