

Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **17**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**
- Temp **52 C**, Time **25 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **25 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	1.5 kg (50%)	80 %	3
Grain	Pszeniczny	1.5 kg (50%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	15 g	60 min	3.5 %
Boil	Lublin (Lubelski)	15 g	40 min	4 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
fm 51	Ale	Liquid	60 ml	---