

## 'Grodzisz' 9 BLG

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **11**
- SRM **3**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **46 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **49.7C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **10 min** at **73C**
- Keep mash **1 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2.8 kg (66.7%)	80 %	3
Grain	Strzegom Pilzneński	1.4 kg (33.3%)	80 %	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
FM51 Grodzie Dębowe	Wheat	Liquid	30 ml	Fermentum Mobile