

# GRODZISKIE 9 Blg. # 12

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **17**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 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**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **50.3C**
- 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**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 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)	25 g	60 min	4 %
Boil	Lublin (Lubelski)	5 g	10 min	4 %
Boil	Cascade PL	20 g	10 min	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	23 g	Fermentis