

# Grodziskie

- Gravity **8.2 BLG**
- ABV ---
- IBU **17**
- SRM **4.9**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **70 C**, Time **40 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **70C**
- Keep mash **1 min** at **77C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pszeniczny wędzony dębem	2 kg (66.7%)	80 %	5
Grain	Pszeniczny	0.5 kg (16.7%)	85 %	4
Grain	Pszeniczny Karmelowy	0.1 kg (3.3%)	75 %	125
Grain	Pilzneński	0.4 kg (13.3%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Lublin (Lubelski)	30 g	0 min	4 %
Boil	Lublin (Lubelski)	25 g	60 min	4 %
Boil	Lublin (Lubelski)	15 g	15 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11 g	Safbrew