

# grodzkie v1

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- Gravity **7.9 BLG**
- ABV ---
- IBU **25**
- SRM **3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **38 C**, Time **40 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **40 min** at **38C**
- Keep mash **20 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **23.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3.4 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	30 g	60 min	3.8 %
Boil	Lomik	30 g	5 min	3.8 %
Boil	Sybilla	30 g	10 min	6.5 %

## Yeasts

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