

# Grodziskie

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- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **21**
- SRM **2.4**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.1 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **11.1 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **23.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3 kg (100%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	lunga	50 g	---	11 %
Boil	lunga	10 g	60 min	11 %
Boil	lunga	10 g	10 min	11 %
Aroma (end of boil)	lunga	20 g	0 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
s-33	Ale	Dry	11 g	---