

# Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **21**
- SRM **2.5**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **10 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **19.8 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**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **47.3C**
- 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**
- Keep mash **5 min** at **78C**
- Sparge using **-2.4 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	1.8 kg (100%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomyski	15 g	55 min	3.8 %
Boil	Tomyski	10 g	25 min	3.8 %
Boil	Tomyski	5 g	5 min	3.8 %

## Yeasts

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