

# Grodziskie

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- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **30**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **27.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **37 C**, Time **30 min**
- Temp **50 C**, Time **20 min**
- Temp **70 C**, Time **30 min**
- Temp **75 C**, Time **30 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **39.1C**
- Add grains
- Keep mash **30 min** at **37C**
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **70C**
- Keep mash **30 min** at **75C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **27.9 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
Boil	Tradition	37 g	90 min	5.4 %
Boil	Tradition	25 g	3 min	5.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Ale	Dry	20 g	Fermentis