

# Grodziskie V4

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **21**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 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 **38 C**, Time **50 min**
- Temp **51 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **50 min** at **38C**
- Keep mash **20 min** at **51C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2 kg (66.7%)	80 %	3
Grain	Weyermann - Grodziski	1 kg (33.3%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	25 g	60 min	4.6 %
Boil	Lomik	15 g	20 min	4.6 %
Boil	Lomik	10 g	5 min	4.6 %

## Yeasts

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