

# Grodziskie pierwsze

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **24**
- SRM **4.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

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

## Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	3 kg (100%)	82 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	30 g	60 min	4.6 %
Boil	Lomik	10 g	40 min	4.6 %
Aroma (end of boil)	Lomik	10 g	1 min	4.6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska ryżowa	100 g	Bottling	1 min
Złoże filtracyjne				