

# Grodziskie

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- Gravity **7.8 BLG**
- ABV ---
- IBU **33**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **15 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pszeniczny wędzony	3 kg (100%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11.2 %
Boil	lunga	10 g	10 min	11.2 %
Whirlpool	lunga	20 g	0 min	11.2 %

## Yeasts

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

## Notes

- Złoże filtracyjne ułożone z 50g szyszek Magnum.  
*Apr 14, 2016, 12:45 PM*