

# Grodziskie

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- Gravity **7.9 BLG**
- ABV ---
- IBU **33**
- SRM **3.1**
- 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 **24.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **12.9 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **75C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	2 kg (66.7%)	80 %	4
Grain	Wędzony Steinbach	0.5 kg (16.7%)	75 %	5.3
Grain	Pilzneński	0.5 kg (16.7%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Aroma (end of boil)	Tradition	10 g	10 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	700 ml	Fermentum Mobile

## Notes

- W planach warzenie 22.10.2015r.  
*Sep 16, 2015, 9:35 PM*