

# grodzisz

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **33**
- SRM **3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **30.6 liter(s)**

## Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **51 C**, Time **15 min**
- Temp **62 C**, Time **5 min**
- Temp **72 C**, Time **55 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **5 min** at **62C**
- Keep mash **55 min** at **72C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	bruntal grodziski	3 kg (75%)	80 %	4
Grain	Weyermann - Pale Ale Malt	1 kg (25%)	85 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	30 g	60 min	9.3 %
Boil	tomyski	25 g	15 min	4 %
Boil	tomyski	25 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	---