

# hoppy Grodziskie

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **32**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3 kg (90.9%)	80 %	3
Grain	Bestmalz Carmel Pils	0.3 kg (9.1%)	75 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	5 g	60 min	12 %
Boil	Citra	5 g	60 min	13.7 %
Boil	Mosaic	5 g	30 min	12 %
Boil	Citra	5 g	30 min	13.7 %
Boil	Mosaic	10 g	5 min	12 %
Boil	Citra	10 g	5 min	13.7 %
Dry Hop	Mosaic	10 g	7 day(s)	12 %
Dry Hop	Citra	10 g	7 day(s)	13.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-33	Ale	Dry	11.5 g	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min