

# Hoppy Grodziskie

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- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **24**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.3 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **22.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	3 kg (93.8%)	80 %	4
Grain	Bestmalz Carmel Pils	0.2 kg (6.3%)	75 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	lunga	15 g	10 min	11 %
Dry Hop	Citra	50 g	7 day(s)	13.7 %

## Yeasts

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