

# HOPPY GRODZISKIE

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **32**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **28.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **38 C**, Time **30 min**
- Temp **52 C**, Time **30 min**
- Temp **63 C**, Time **25 min**
- Temp **72 C**, Time **35 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **30 min** at **38C**
- Keep mash **30 min** at **52C**
- Keep mash **25 min** at **63C**
- Keep mash **35 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **22.1 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

## Fermentables

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

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	2 g	60 min	14.5 %
Boil	Galaxy	15 g	20 min	14.5 %
Boil	Galaxy	20 g	7 min	14.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Liquid	100 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech	5 g	Boil	15 min
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