

# hoppy Grodziskie

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **27**
- SRM **2.8**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	3.4 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Mosaic	5 g	20 min	11.4 %
Whirlpool	Cascade	5 g	20 min	6 %
Whirlpool	Centennial	5 g	20 min	10.5 %
Whirlpool	Simcoe	5 g	20 min	13.2 %
Whirlpool	Columbus/Tomahawk/Zeus	5 g	20 min	15.5 %
Boil	Centennial	5 g	30 min	10.5 %
Boil	Cascade	5 g	30 min	6 %
Boil	Simcoe	5 g	60 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	Safbrew

## Extras

Type	Name	Amount	Use for	Time
Fining	karuk	99999 g	Primary	5 day(s)