

# Hop grodzisz

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **61**
- SRM **3.2**
- Style **American IPA**

## 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 **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3 kg (57.7%)	81 %	6
Grain	Weyermann oak smoked	2 kg (38.5%)	--- %	---
Grain	Crystal	0.2 kg (3.8%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	10.2 %
Boil	Magnum	15 g	30 min	10.2 %
Boil	Lublin (Lubelski)	37 g	30 min	4.9 %
Aroma (end of boil)	Simcoe	30 g	0 min	12 %
Aroma (end of boil)	Mosaic	30 g	0 min	11.4 %
Dry Hop	Simcoe	50 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	1000 g	Safale