

## #69 Grodziskie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **21**
- SRM **3.2**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.2 liter(s)**
- Total mash volume **12.3 liter(s)**

### Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **9.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wędzony gruszą	1.365 kg (44.5%)	85 %	10
Grain	Pszeniczny	1.7 kg (55.5%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum (PL)!	10 g	60 min	10.5 %
Boil	Magnum (PL)!	20 g	10 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	10 min
Herb	Trawa cytrynowa	30 g	Boil	5 min