

## 11. Groklin

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- Gravity **7.8 BLG**
- ABV ---
- IBU **23**
- SRM **2.8**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	3 kg (100%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	30 g	60 min	5.5 %
Boil	Tradition	10 g	10 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
s-33	Ale	Dry	11.5 g	---