

## Pierwsze koty za płoty

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- Gravity **7.9 BLG**
- ABV ---
- IBU **26**
- SRM **3.1**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **7.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **71C**
- Keep mash **5 min** at **78C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.5 kg (20%)	80 %	4
Grain	Weyermann - Grodziski	1 kg (40%)	80 %	4
Grain	Strzegom pszeniczny	1 kg (40%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	11.8 %
Boil	Columbus/Tomahawk/Zeus	5 g	30 min	14 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	10 g	1 min	14 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safale s-33	Ale	Dry	10 g	---