

# Czarny Grodzisz

- Gravity **7.8 BLG**
- ABV ---
- IBU **25**
- SRM **30.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **15.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5 liter(s)**
- Total mash volume **6.7 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **5 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **71C**
- Keep mash **5 min** at **76C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	1.26 kg (75%)	80 %	4
Grain	Rauch Malt (Germany)	0.25 kg (14.9%)	81 %	4
Grain	Strzegom Czekoladowy ciemny	0.085 kg (5.1%)	68 %	1200
Grain	Jęczmień palony	0.085 kg (5.1%)	55 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	70 min	12.7 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	30 min	3.6 %
Aroma (end of boil)	Saaz (Czech Republic)	14 g	1 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	5.75 g	Safale
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## Notes

- Słód czekoladowy i jęczmień palony na ostatnie 10 minut.  
*Nov 13, 2015, 11:44 PM*