

Czarnogród

- Gravity **9.5 BLG**
- ABV ---
- IBU **21**
- SRM **22.8**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **66.3 C**, Time **40 min**
- Temp **71.2 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **40 min** at **66.3C**
- Keep mash **30 min** at **71.2C**
- Keep mash **1 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	0.9 kg (27.3%)	80 %	3
Grain	Płatki owsiane	0.4 kg (12.1%)	85 %	3
Grain	Weyermann - Carafa II Special	0.3 kg (9.1%)	65 %	1150
Grain	Abbey Malt Weyermann	0.3 kg (9.1%)	75 %	45
Grain	Weyermann - Smoked Malt	1.4 kg (42.4%)	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	7 g	60 min	7 %
Boil	Premiant	9 g	30 min	9 %
Aroma (end of boil)	Marynka	15 g	10 min	9 %
Whirlpool	Marynka	7 g	0 min	9 %
Whirlpool	Premiant	6 g	0 min	7 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	13 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min