

#096 Grodziskie

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **25**
- SRM **3.2**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33.4 liter(s)**

Mash information

- Mash efficiency **63 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.7 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bruntal pszeniczny wędzony dębem	1.2 kg (25%)	81 %	3
Grain	Viking wędzony dębem	3.6 kg (75%)	81 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Mittelfruh	60 g	60 min	3.8 %
Boil	Hallertau Mittelfruh	10 g	15 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	150 g	Mash	60 min
Water Agent	CaCO3	3 g	Mash	60 min
Water Agent	CaCO3	4 g	Mash	60 min

Water Agent	pożywka dla drożdży Pinnacle	0.5 g	Boil	10 min
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