

woda po parówkach

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **17**
- SRM **2.3**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **69 C**, Time **40 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **69C**
- Keep mash **1 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3 kg (100%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	żatecki	30 g	60 min	3.43 %
Aroma (end of boil)	żatecki	20 g	10 min	3.43 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Ale	Liquid	300 ml	---