

Anna Grodzka

- Gravity **6.3 BLG**
- ABV **2.4 %**
- IBU **19**
- SRM **2**
- 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 **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **13.8 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **67 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **11.3 liter(s)** of strike water to **48.9C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszoniczny wędzony dębem	2.5 kg (100%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %
Boil	Lublin (Lubelski)	20 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale K-97	Wheat	Dry	11.5 g	---