

Patriot

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **10**
- SRM **3.4**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **69 C**, Time **70 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **70 min** at **69C**
- Keep mash **0 min** at **78C**
- Sparge using **23.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	4 kg (100%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	7 g	60 min	6 %
Boil	Puławski	43 g	5 min	6 %
Dry Hop	Puławski	60 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Fermentis