

Quercus

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **15**
- SRM **2.6**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **5.3 liter(s)**
- Total mash volume **6.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **71 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **5.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **71C**
- Keep mash **1 min** at **76C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	1.3 kg (86.7%)	80 %	3
Grain	Viking Wędzony bukiem	0.2 kg (13.3%)	82 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomyski	8 g	60 min	4.9 %
Boil	Puławski	5 g	10 min	9 %

Yeasts

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