

Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **25**
- SRM **2.8**
- 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 **65 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **55.2C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **9.3 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 bruntal	2 kg (50%)	80 %	3
Grain	Grodziski pszeniczny wędzony dębem viking	2 kg (50%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomyski	40 g	60 min	4.9 %
Whirlpool	Tomyski	30 g	0 min	4.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis