

ala grodziska

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **36**
- SRM **3.6**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **56.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **69C**
- Keep mash **1 min** at **76C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszoniczny	1.7 kg (50%)	85 %	4
Grain	Wędzony bukiem Viking Malt	1 kg (29.4%)	82 %	10
Grain	Strzegom Pilzneński	0.7 kg (20.6%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	30 g	60 min	7.2 %
Aroma (end of boil)	Puławski	20 g	15 min	7.2 %

Yeasts

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