

hoppy grodziskie

- Gravity **6.6 BLG**
- ABV **2.5 %**
- IBU **35**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

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 liter(s) / kg**
- Mash size **3.9 liter(s)**
- Total mash volume **5.2 liter(s)**

Steps

- Temp **39 C**, Time **50 min**
- Temp **51 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **3.9 liter(s)** of strike water to **42.1C**
- Add grains
- Keep mash **50 min** at **39C**
- Keep mash **20 min** at **51C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony Dębem Weyermann	1.04 kg (80.6%)	80 %	5
Grain	Pszoniczny	0.25 kg (19.4%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	5.52 g	60 min	11.4 %
Boil	Willamette	13.79 g	20 min	5 %
Aroma (end of boil)	Willamette	6.9 g	5 min	5 %
Aroma (end of boil)	Mosaic	6.9 g	5 min	11.4 %
Dry Hop	Mosaic	7.58 g	8 day(s)	11.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	68.96 ml	---