

Voyager - Grodziskie z chmielami

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **27**
- SRM **2.7**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg (100%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	35 min	11.5 %
Boil	Simcoe	25 g	5 min	11.5 %
Dry Hop	Simcoe	40 g	3 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	10 g	Fermentis