

Górki

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **37**
- SRM **7.1**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (93.8%)	80 %	5
Grain	Strzegom Karmel 150	0.3 kg (6.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	20 g	60 min	6.8 %
Boil	Perle	20 g	30 min	6.7 %
Zamiast Fuggles - Perle 6,7 AK ilosc dostosowac do zadanego ibu				
Boil	Cascade	20 g	5 min	7.3 %
Boil	Sybilla	20 g	15 min	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-04	Ale	Dry	11 g	Fermentis