

Głód

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **18**
- SRM **26**
- Style **Dry Stout**

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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **70 C**, Time **50 min**
- Temp **78 C**, Time **5 min**
- Temp **68 C**, Time **1 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **1 min** at **68C**
- Keep mash **50 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (88.2%)	79 %	6
Grain	Jęczmień palony	0.2 kg (3.9%)	55 %	985
Grain	Strzegom Czekoladowy 1200	0.2 kg (3.9%)	68 %	1202
Grain	Wędzony bukiem Viking Malt	0.2 kg (3.9%)	82 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Goldings	15 g	45 min	5.1 %
Boil	Goldings	15 g	30 min	5.1 %
Boil	Goldings	20 g	10 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile