

Ciemno to widzę

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **33**
- SRM **36.4**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.4 kg (67.3%)	80 %	5
Grain	Caraaroma	0.3 kg (5.9%)	78 %	400
Grain	Płatki owsiane	0.6 kg (11.9%)	85 %	3
Grain	Jęczmień palony	0.3 kg (5.9%)	55 %	985
Grain	Briess - Chocolate Malt	0.2 kg (4%)	60 %	690
Grain	Brown Malt (British Chocolate)	0.15 kg (3%)	70 %	128
Grain	Jęczmień palony	0.1 kg (2%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	35 g	45 min	8.2 %
Boil	East Kent Goldings	15 g	5 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale