

ostry

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **41**
- SRM **42.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **33.6 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **25.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (35.7%)	80 %	5
Grain	Casle Malting Whisky Nature	2 kg (23.8%)	85 %	4
Grain	Monachijski	1.5 kg (17.9%)	80 %	16
Grain	Carafa III	0.5 kg (6%)	70 %	1034
Grain	Platki owsiane	0.6 kg (7.1%)	60 %	3
Grain	Carafa II	0.4 kg (4.8%)	70 %	812
Grain	Caraaroma	0.4 kg (4.8%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	40 min	13.2 %
Boil	Magnum	20 g	20 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	2 g	Fermentis