

Porter

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **37**
- SRM **23.1**
- Style **Brown Porter**

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 **3.5 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **30.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (74.1%)	80 %	7
Grain	Biscuit Malt	1 kg (14.8%)	79 %	45
Grain	Fawcett - Brown	0.5 kg (7.4%)	72 %	150
Grain	Fawcett - Pszeniczny Czekoladowy	0.25 kg (3.7%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	30 g	5 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis