

imperial brown porter

- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **31**
- SRM **37.7**
- Style **Brown Porter**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (70.5%)	80 %	5
Grain	Strzegom Karmel 150	1.5 kg (19.2%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.6%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.2%)	68 %	1200
Grain	Viking Barwiący Obłuszczony	0.15 kg (1.9%)	65 %	1000
Sugar	Brown Sugar, Dark	0.2 kg (2.6%)	100 %	99

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	10 g	65 min	5.2 %
Boil	Chinook	10 g	65 min	13 %
Boil	Cascade PL	54 g	10 min	5.2 %
Boil	Vic Secret	10 g	5 min	16.3 %
Boil	Calista	50 g	5 min	3.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis