

Black Prince (Porter)

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **25**
- SRM **25**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (84%)	80 %	5
Grain	Karmelowy żytni Strzegom	0.14 kg (2.9%)	75 %	150
Grain	Carafa II	0.25 kg (5.3%)	70 %	812
Grain	Jęczmień palony	0.25 kg (5.3%)	55 %	985
Grain	Brown Malt (British Chocolate)	0.12 kg (2.5%)	70 %	128

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	18 g	60 min	13.5 %
Aroma (end of boil)	Fuggles	30 g	0 min	4.5 %

Yeasts

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