

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 |