

Robust Porter 3.0 (Black Prince)

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **29**
- SRM **30.8**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **0 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **23.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- 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 **5 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 **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **23.3 liter(s)** of wort

Fermentables

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

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Magnum | 18 g | 60 min | 13.5 % |
| Boil | Fuggles | 30 g | 0 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 150 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|---------------------------|-----|------|--------|
| Fining | Mech irlandzki | 3 g | Boil | 10 min |
| Water Agent | Drożdże nieaktywne i cynk | 1 g | Boil | 10 min |