

Black IPA

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **68**
- SRM **21.5**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **67 C**, Time **65 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **65 min** at **67C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4.7 kg (79%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.5 kg (8.4%) | 78 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (6.7%) | 80 % | 3 |
| Grain | Weyermann - Carafa II | 0.25 kg (4.2%) | 30 % | 837 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.7%) | 1 % | 1050 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|----------|------------|
| Boil | Simcoe (paczkomat) | 35 g | 60 min | 14.5 % |
| Aroma (end of boil) | Mosaic | 30 g | 10 min | 12.2 % |
| Whirlpool | Citra | 25 g | 1 min | 13.1 % |
| Whirlpool | Mosaic | 20 g | 0 min | 12.2 % |
| Whirlpool | Simcoe (paczkomat) | 15 g | 0 min | 14.5 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 13.1 % |
| Dry Hop | Mosaic | 50 g | 3 day(s) | 12.2 % |
| Dry Hop | Cascade | 50 g | 3 day(s) | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|-------------|-------------|---------------|-------------------|
| Lallemand Nottingham (high performance ale yeast) | Ale | Slant | 145 ml | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|---------------|----------------|-------------|
| Fining | Mech Irlandzki | 5 g | Boil | 10 min |