

The color of ass - session black IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **70**
- SRM **29**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **1 %**
- Size with trub loss **22.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pilsner malt | 1 kg (15.6%) | 80 % | 4 |
| Grain | Viking Pale Ale malt | 4 kg (62.5%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 0.5 kg (7.8%) | 78 % | 5 |
| Grain | Caramel/Crystal Malt - 120L | 0.3 kg (4.7%) | 60 % | 236 |
| Grain | Castle Cafe | 0.15 kg (2.3%) | 1 % | 500 |
| Grain | Carafa III | 0.15 kg (2.3%) | 1 % | 1034 |
| Grain | Carafa II | 0.15 kg (2.3%) | 1 % | 812 |
| Grain | Jęczmień palony | 0.15 kg (2.3%) | 1 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------------|--------|--------|------------|
| Boil | Centennial (US) | 10 g | 60 min | 10.5 % |
| Boil | Ekuanot (US) | 15 g | 60 min | 14.5 % |
| Boil | Citra (US) | 10 g | 15 min | 12.9 % |
| Boil | Mosaic (US) | 10 g | 15 min | 11.3 % |
| Whirlpool | Citra (US) | 30 g | 20 min | 12.9 % |

| | | | | |
|-----------|--------------|-------|----------|--------|
| Whirlpool | Ekuanot (US) | 30 g | 20 min | 14.5 % |
| Dry Hop | Ekuanot (US) | 37 g | 4 day(s) | 14.5 % |
| Dry Hop | Sabro (USA) | 100 g | 4 day(s) | 14.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|-------------|
| Wyeast - American Ale II | Ale | Liquid | 100 ml | Wyeast Labs |