

Black ipa #2

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **45**
- SRM **34.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **70C**
- Keep mash **5 min** at **77C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.6 kg (69.2%) | 80 % | 5 |
| Grain | Pszeniczny | 0.6 kg (11.5%) | 85 % | 4 |
| Grain | Weyermann - Dehusked Carafa III | 0.5 kg (9.6%) | 70 % | 1024 |
| na wyśładzanie | | | | |
| Grain | Barley, Flaked | 0.3 kg (5.8%) | 70 % | 4 |
| Sugar | Corn Sugar (Dextrose) | 0.2 kg (3.8%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Amarillo | 30 g | 60 min | 9.5 % |
| Boil | Mosaic | 20 g | 10 min | 10 % |
| Aroma (end of boil) | Amarillo | 10 g | 0 min | 9.5 % |
| Aroma (end of boil) | Citra | 50 g | 0 min | 12 % |
| 75C-20 | | | | |
| Dry Hop | Amarillo | 50 g | 3 day(s) | 9.5 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 100 ml | --- |

Notes

- start od 15C - 17 do 20
2,5 g glukozy na butelke
Jan 15, 2019, 7:37 PM