

#38 Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **79**
- SRM **39.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **27.1 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|-----------------|--------|------|
| Grain | Briess - Pilsen Malt | 5.07 kg (76.5%) | 80.5 % | 2 |
| Grain | Caramel/Crystal Malt - 20L | 0.28 kg (4.2%) | 75 % | 39 |
| Grain | Wheat, Flaked | 0.65 kg (9.8%) | 60 % | 4 |
| Grain | Weyermann - Dehusked Carafa III | 0.63 kg (9.5%) | 25 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil | Mosaic | 66 g | 60 min | 12.3 % |
| Whirlpool | Mosaic | 160 g | 1 min | 12.3 % |
| Dry Hop | Mosaic | 200 g | 2 day(s) | 12.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|-------|--------|-------------|
| Wyeast - 1272 American Ale II | Ale | Slant | 200 ml | Wyeast Labs |