

## Black IPA#2

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **64**
- SRM **35.1**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**
- Temp **76 C**, Time **15 min**

### Mash step by step

- Heat up **20.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **15 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

### Fermentables

| Type    | Name                                 | Amount         | Yield  | EBC  |
|---------|--------------------------------------|----------------|--------|------|
| Grain   | Viking Pale Ale malt                 | 2.5 kg (35%)   | 80 %   | 5    |
| Grain   | Pale Ale optima                      | 2.8 kg (39.2%) | 81.6 % | 7    |
| Grain   | Pilzneński optima                    | 0.8 kg (11.2%) | 82.6 % | 4    |
| Grain   | Weyermann - Carapils                 | 0.35 kg (4.9%) | 78 %   | 4    |
| Grain   | Carafa III special                   | 0.3 kg (4.2%)  | 65 %   | 1400 |
| Adjunct | jeczmien palony, czrafa 3 s na zimno | 0.4 kg (5.6%)  | 1 %    | 1000 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | lunga   | 25 g   | 60 min | 12.8 %     |
| Boil    | Simcoe  | 15 g   | 20 min | 13.1 %     |
| Boil    | Mosaic  | 15 g   | 20 min | 12.4 %     |
| Boil    | Cascade | 15 g   | 20 min | 6.9 %      |
| Boil    | Mosaic  | 15 g   | 3 min  | 12.4 %     |
| Boil    | Simcoe  | 15 g   | 3 min  | 13.1 %     |
| Boil    | Cascade | 15 g   | 3 min  | 6.9 %      |
| Boil    | Simcoe  | 20 g   | 3 min  | 13.1 %     |

|         |          |      |          |        |
|---------|----------|------|----------|--------|
| Boil    | Cascade  | 20 g | 3 min    | 6.9 %  |
| Boil    | Mosaic   | 20 g | 3 min    | 12.4 % |
| Dry Hop | Cascade, | 30 g | 4 day(s) | 12.4 % |
| Dry Hop | Simcoe   | 40 g | 4 day(s) | 10 %   |
| Dry Hop | Citra    | 25 g | 4 day(s) | 13.3 % |

### Yeasts

| Name | Type | Form   | Amount  | Laboratory |
|------|------|--------|---------|------------|
| sds  | Ale  | Liquid | 1100 ml | ---        |

### Extras

| Type   | Name        | Amount | Use for | Time   |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 1 g    | Boil    | 10 min |