

## Black IPA

- Gravity **16.1 BLG**
- ABV ---
- IBU **90**
- SRM **72.9**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **17.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 3 kg (52.2%)   | 80 %  | 5    |
| Grain | Strzegom Monachijski typ II | 1 kg (17.4%)   | 79 %  | 22   |
| Grain | Carafa III                  | 0.25 kg (4.3%) | 70 %  | 1034 |
| Grain | Strzegom Czekoladowy 1200   | 0.5 kg (8.7%)  | 68 %  | 1202 |
| Grain | Strzegom Karmel 600         | 0.5 kg (8.7%)  | 68 %  | 601  |
| Grain | Weyermann - Carapils        | 0.5 kg (8.7%)  | 78 %  | 4    |

### Hops

| Use for             | Name   | Amount | Time      | Alpha acid |
|---------------------|--------|--------|-----------|------------|
| Boil                | Mosaic | 20 g   | 60 min    | 11.7 %     |
| Boil                | Simcoe | 20 g   | 50 min    | 13.2 %     |
| Boil                | Mosaic | 20 g   | 30 min    | 11.7 %     |
| Boil                | Simcoe | 20 g   | 15 min    | 13.2 %     |
| Aroma (end of boil) | Mosaic | 10 g   | 5 min     | 11.7 %     |
| Aroma (end of boil) | Simcoe | 10 g   | 5 min     | 13.2 %     |
| Dry Hop             | Citra  | 100 g  | 10 day(s) | 13.5 %     |

**Yeasts**

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |